GravitySketch
Tool order: 0

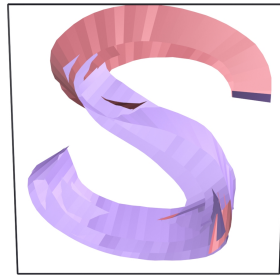AdaptiBrush
Tool order: 1

P1

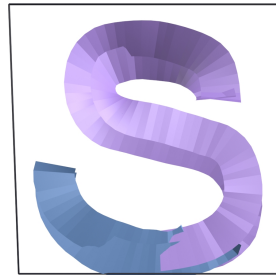Practice: 17.62 min

Practice: 12.81 min
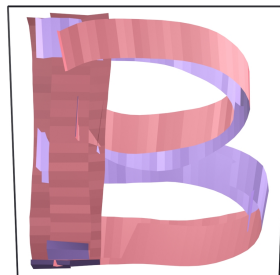
S

3.05 minutes

1.8 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
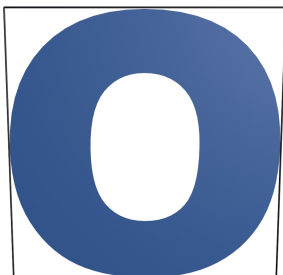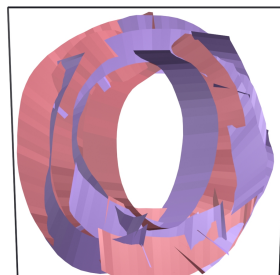Preference: 5 (Definitely AdaptiBrush)
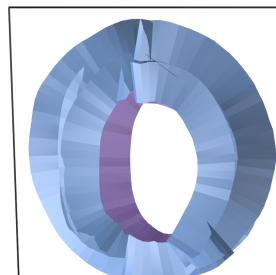
B

5.4 minutes

1.48 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
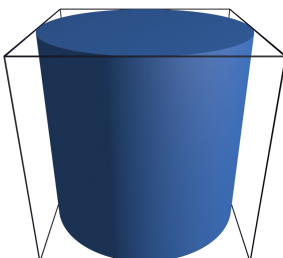Preference: 5 (Definitely AdaptiBrush)
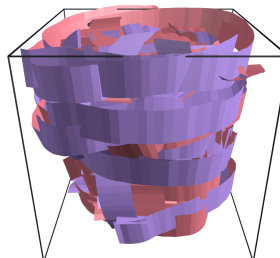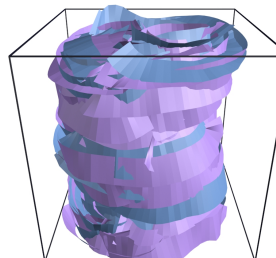
O

9.44 minutes

4.21 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 4 (Probably AdaptiBrush)

Cylinder
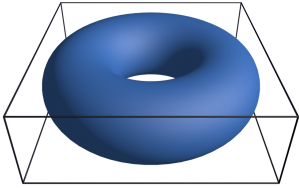
8.76 minutes

4.45 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)
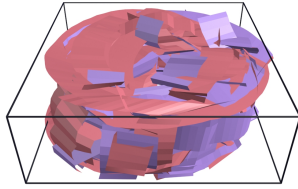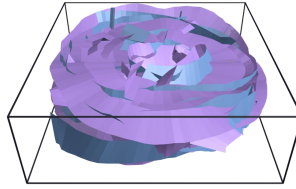
P1

GravitySketch
Tool order: 0

AdaptiBrush
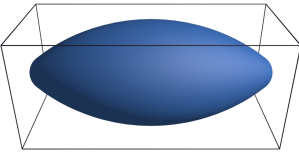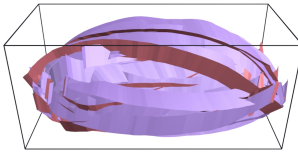**Tool order: 1**

Torus
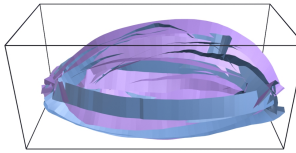
7.17 minutes

4.35 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 2 (Probably GravitySketch)
Effectiveness: 4 (Probably AdaptiBrush)
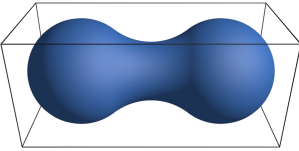Preference: 4 (Probably AdaptiBrush)
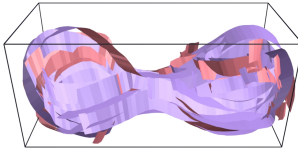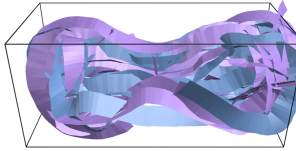
Ellipsoid

23.65 minutes

9.87 minutes

Ease of Use: 3 (Both are Equal)
Output Quality: 3 (Both are Equal)
Effectiveness: 3 (Both are Equal)
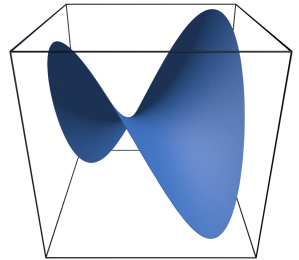Preference: 3 (Both are Equal)
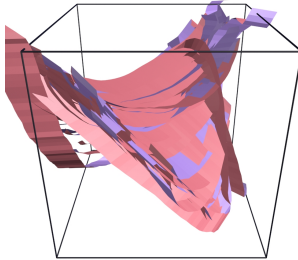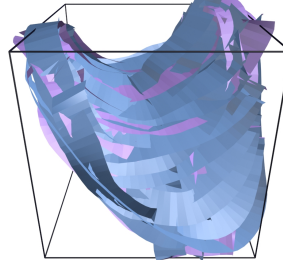
Metaball

12.55 minutes

6.55 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)

Hyperbolic paraboloid

15.74 minutes

22.12 minutes

Ease of Use: 3 (Both are Equal)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 4 (Probably AdaptiBrush)

GravitySketch
Tool order: 0

AdaptiBrush
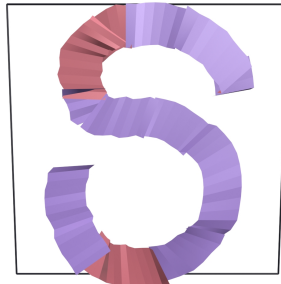**Tool order: 1**

P2

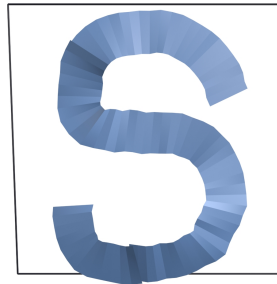**Practice: 11.31 min**

Practice: 8.94 min

S

23.86 minutes

8.17 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
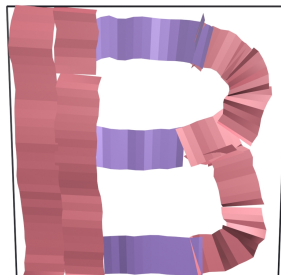Preference: 5 (Definitely AdaptiBrush)

B

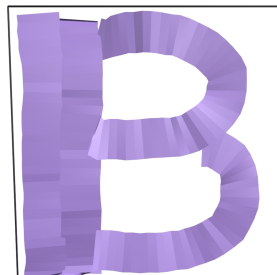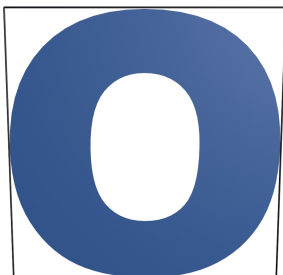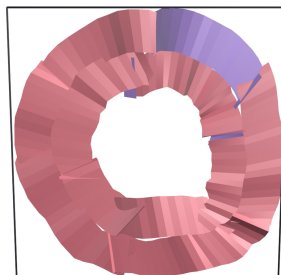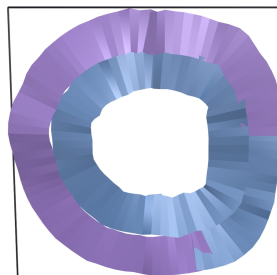11.2 minutes

4.06 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)
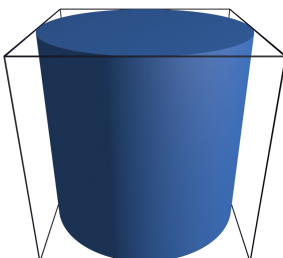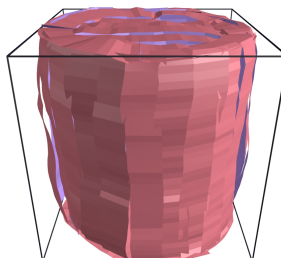
O

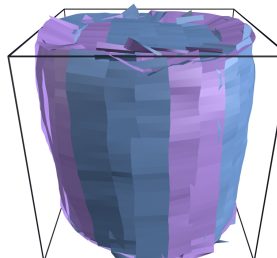6.78 minutes

3.37 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 4 (Probably AdaptiBrush)

Cylinder
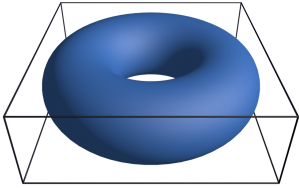
8.31 minutes

5.32 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 1 (Definitely GravitySketch)
Effectiveness: 1 (Definitely GravitySketch)
Preference: 1 (Definitely GravitySketch)
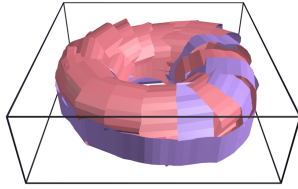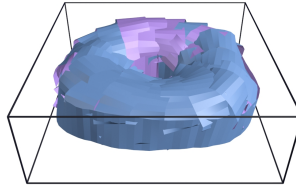
P2

GravitySketch
Tool order: 0

AdaptiBrush
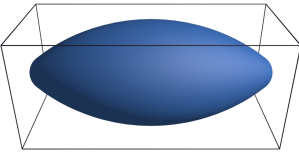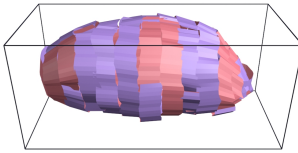**Tool order: 1**

Torus
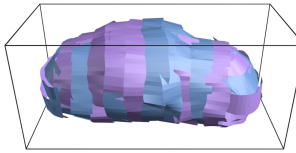
8.46 minutes

6.81 minutes

Ease of Use: 2 (Probably GravitySketch)
Output Quality: 2 (Probably GravitySketch)
Effectiveness: 2 (Probably GravitySketch)
Preference: 2 (Probably GravitySketch)
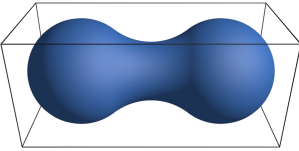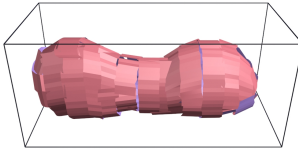
Ellipsoid

11.54 minutes

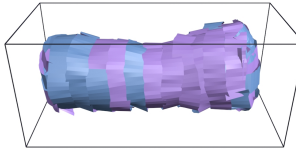11.8 minutes

Ease of Use: 3 (Both are Equal)
Output Quality: 3 (Both are Equal)
Effectiveness: 3 (Both are Equal)
Preference: 2 (Probably GravitySketch)
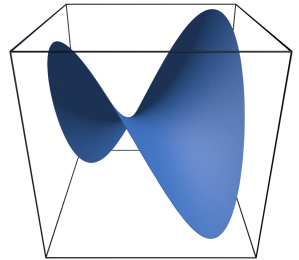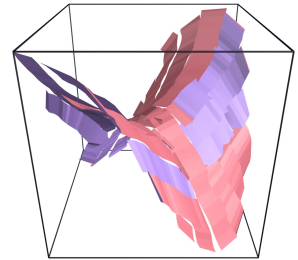
Metaball
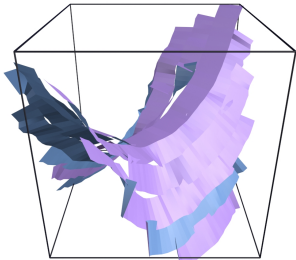
18.39 minutes

21.72 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 2 (Probably GravitySketch)
Effectiveness: 1 (Definitely GravitySketch)
Preference: 1 (Definitely GravitySketch)

Hyperbolic paraboloid

33.41 minutes

9.0 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)

GravitySketch
Tool order: 0
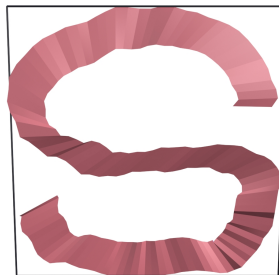
AdaptiBrush
Tool order: 1
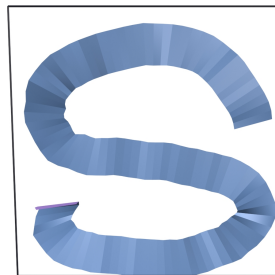
P3

Practice: 24.5 min

Practice: 5.99 min

S

2.91 minutes

0.99 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
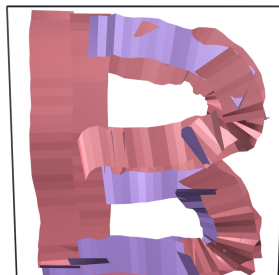Preference: 5 (Definitely AdaptiBrush)
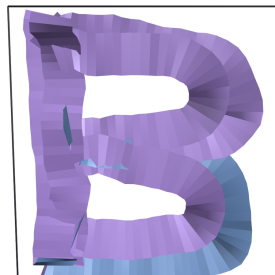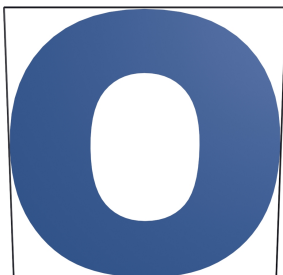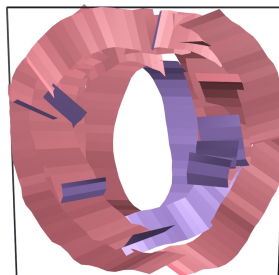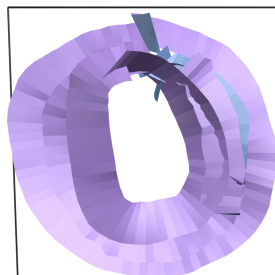
B

2.23 minutes

1.02 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)
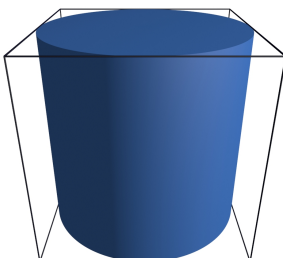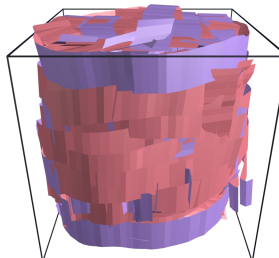
O

3.56 minutes

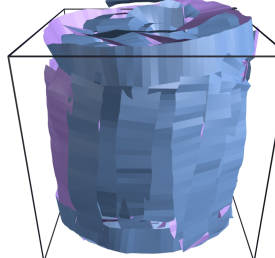2.88 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)

Cylinder

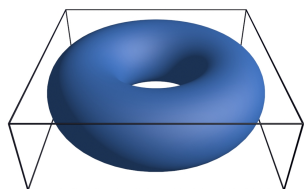12.99 minutes

8.02 minutes

Ease of Use: 2 (Probably GravitySketch)
Output Quality: 1 (Definitely GravitySketch)
Effectiveness: 2 (Probably GravitySketch)
Preference: 1 (Definitely GravitySketch)
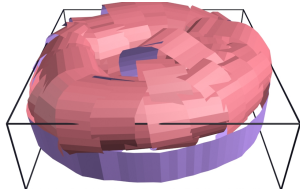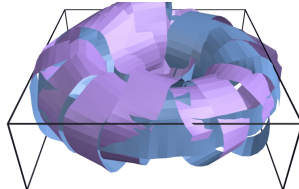
P3

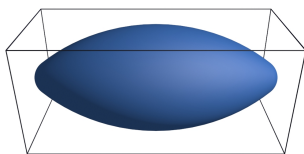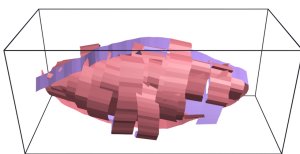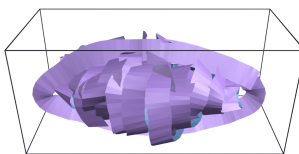|	**GravitySketch** **Tool order: 0**	**AdaptiBrush** **Tool order: 1**	

Torus

13.32 minutes

4.34 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
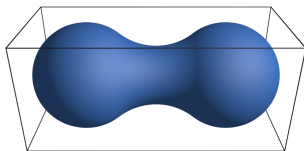Preference: 5 (Definitely AdaptiBrush)

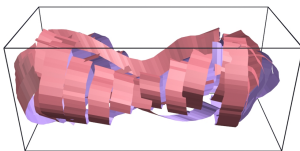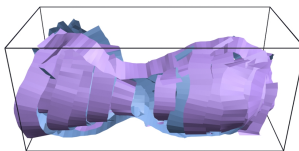Ellipsoid

16.09 minutes

2.36 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
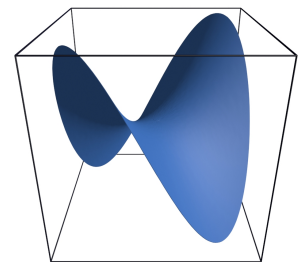Preference: 5 (Definitely AdaptiBrush)
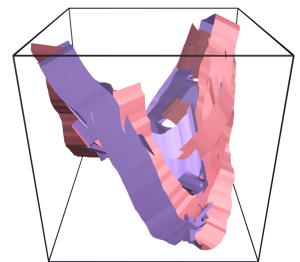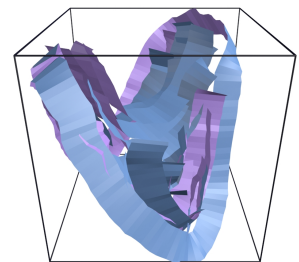
Metaball

3.37 minutes

1.6 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 1 (Definitely GravitySketch)
Effectiveness: 1 (Definitely GravitySketch)
Preference: 1 (Definitely GravitySketch)

Hyperbolic paraboloid

7.45 minutes

2.79 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)

GravitySketch
Tool order: 0
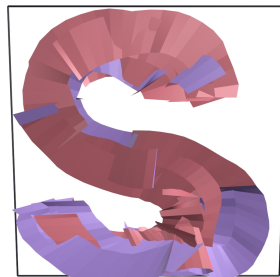
AdaptiBrush
Tool order: 1

P4

Practice: 3.01 min

Practice: 4.97 min

S

S

2.48 minutes

2.39 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
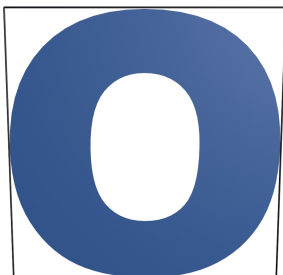Preference: 5 (Definitely AdaptiBrush)
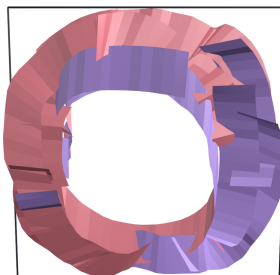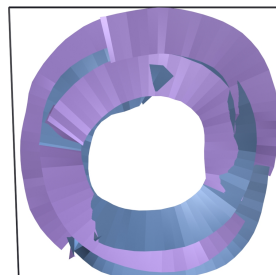
B

B

3.01 minutes

2.33 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 2 (Probably GravitySketch)
Effectiveness: 2 (Probably GravitySketch)
Preference: 2 (Probably GravitySketch)
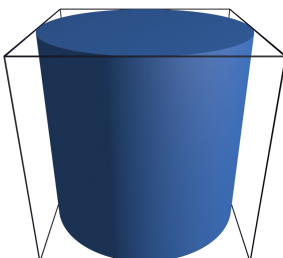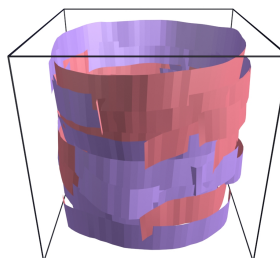
O

O

0.85 minutes
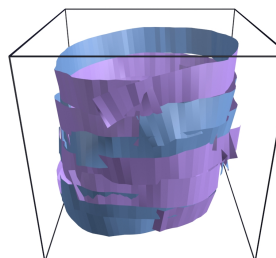
1.04 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 3 (Both are Equal)
Preference: 5 (Definitely AdaptiBrush)

Cylinder

6.56 minutes
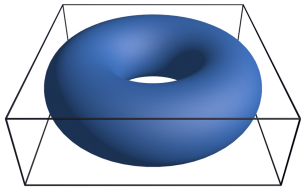
3.63 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 2 (Probably GravitySketch)
Effectiveness: 1 (Definitely GravitySketch)
Preference: 1 (Definitely GravitySketch)
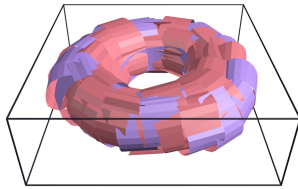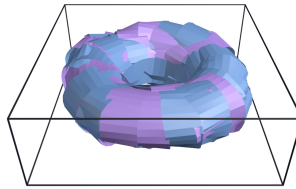
P4

GravitySketch
Tool order: 0

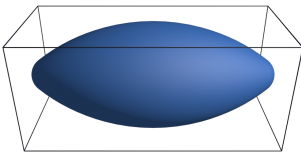**AdaptiBrush**
Tool order: 1

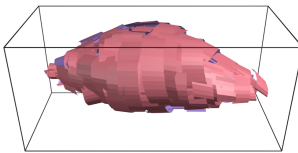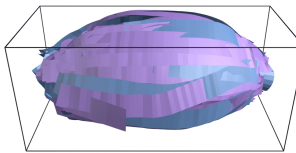Torus

18.11 minutes

25.64 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
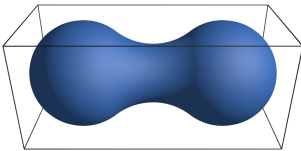Preference: 5 (Definitely AdaptiBrush)
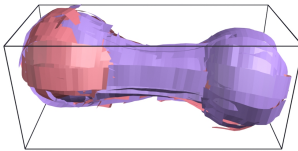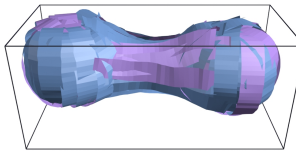
Ellipsoid

3.04 minutes

5.03 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 3 (Both are Equal)
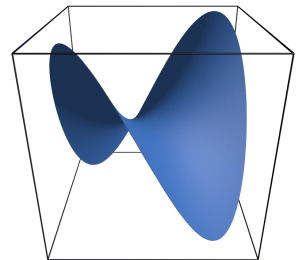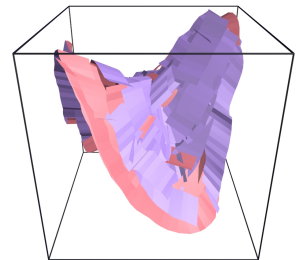Preference: 3 (Both are Equal)

Metaball
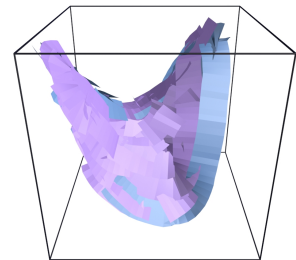
10.1 minutes

6.65 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)

Hyperbolic paraboloid

5.8 minutes

7.88 minutes

Ease of Use: 2 (Probably GravitySketch)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)

GravitySketch
Tool order: 0

AdaptiBrush
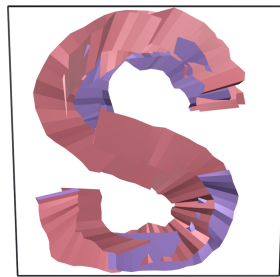**Tool order: 1**

P5

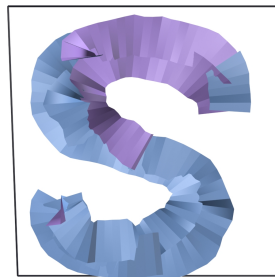**Practice: 10.55 min**

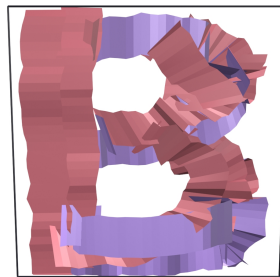**Practice: 13.6 min**

S

6.8 minutes

8.77 minutes

Ease of Use: 2 (Probably GravitySketch)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 1 (Definitely GravitySketch)
Preference: 2 (Probably GravitySketch)
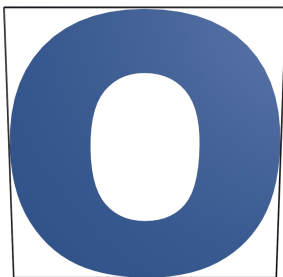
B

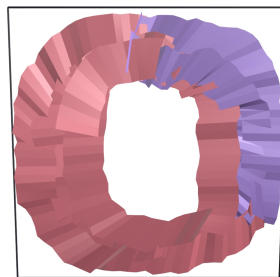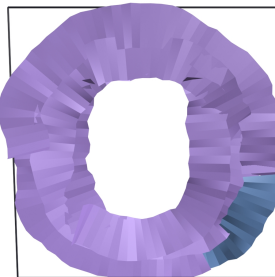5.71 minutes

7.9 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
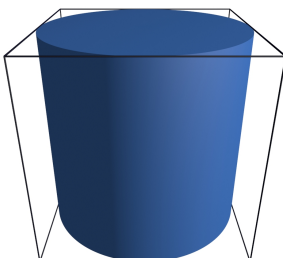Preference: 1 (Definitely GravitySketch)
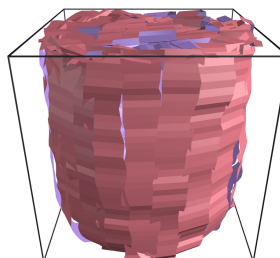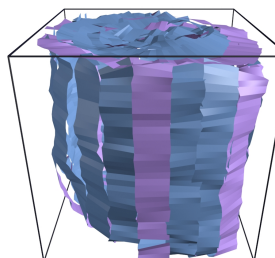
O

5.35 minutes

3.71 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)

Cylinder

12.76 minutes
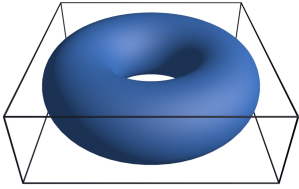
11.31 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
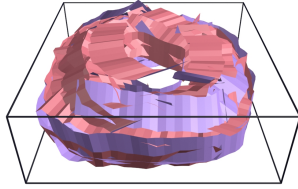Preference: 2 (Probably GravitySketch)
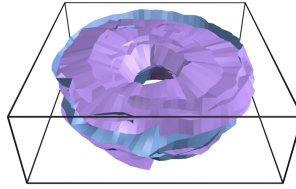
P5

GravitySketch
Tool order: 0

AdaptiBrush
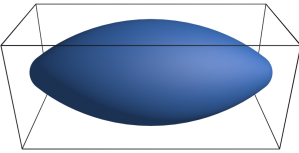**Tool order: 1**

Torus
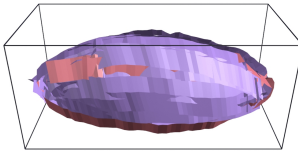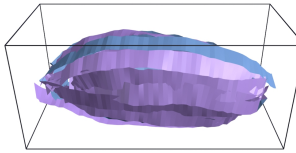
12.24 minutes

9.16 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
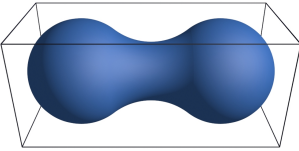Preference: 4 (Probably AdaptiBrush)

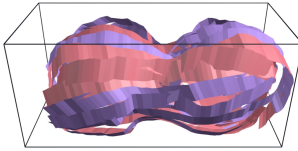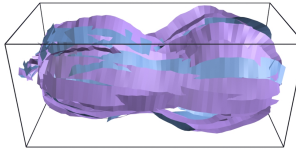Ellipsoid

9.25 minutes

10.25 minutes

Ease of Use: 2 (Probably GravitySketch)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
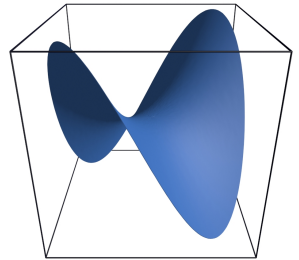Preference: 2 (Probably GravitySketch)
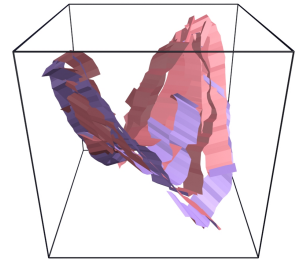
Metaball

10.9 minutes
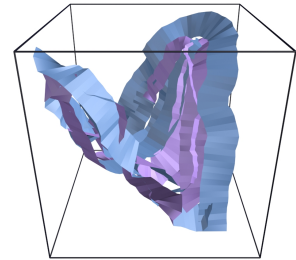
10.26 minutes

Ease of Use: 2 (Probably GravitySketch)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 2 (Probably GravitySketch)
Preference: 4 (Probably AdaptiBrush)

Hyperbolic paraboloid

6.05 minutes

6.23 minutes

Ease of Use: 2 (Probably GravitySketch)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 2 (Probably GravitySketch)

GravitySketch
Tool order: 0

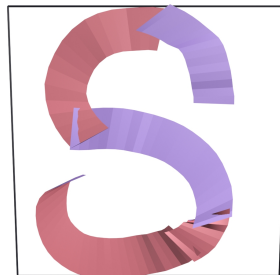AdaptiBrush
Tool order: 1
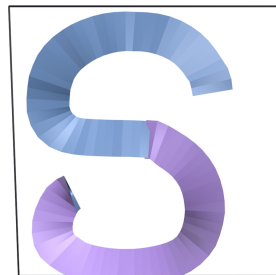
P6

Practice: 5.77 min

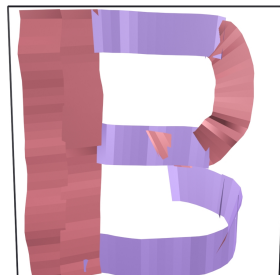Practice: 3.36 min

S

2.07 minutes
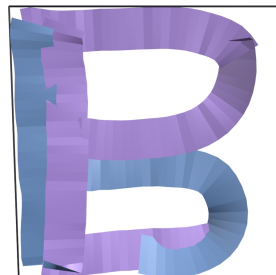
1.16 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
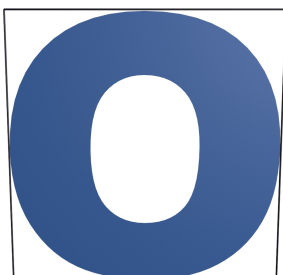Preference: 4 (Probably AdaptiBrush)
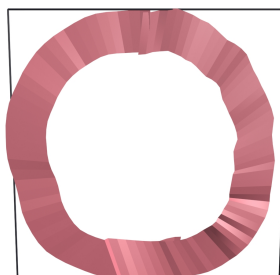
B

4.98 minutes

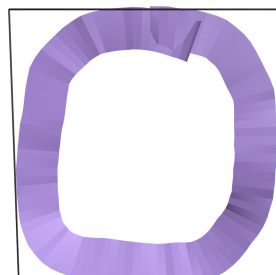1.3 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
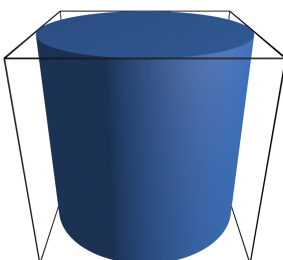Preference: 4 (Probably AdaptiBrush)
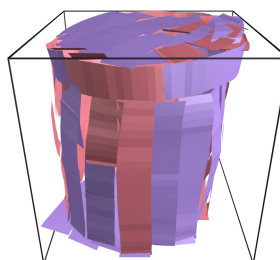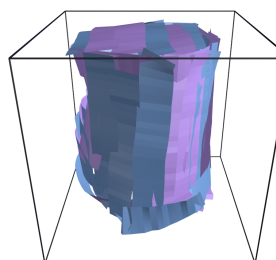
O

3.5 minutes

1.03 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 3 (Both are Equal)
Preference: 4 (Probably AdaptiBrush)
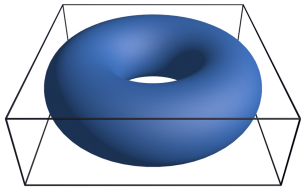
Cylinder

7.36 minutes

6.33 minutes

Ease of Use: 3 (Both are Equal)
Output Quality: 2 (Probably GravitySketch)
Effectiveness: 3 (Both are Equal)
Preference: 2 (Probably GravitySketch)
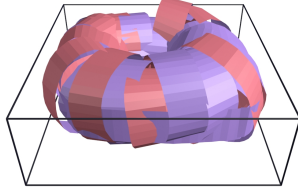
P6

GravitySketch
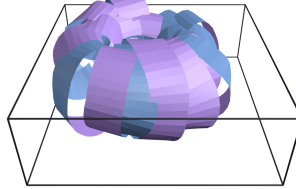**Tool order: 0**

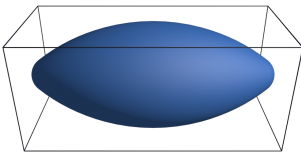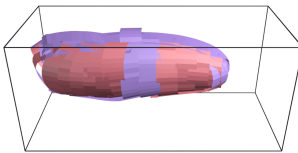**AdaptiBrush**
Tool order: 1

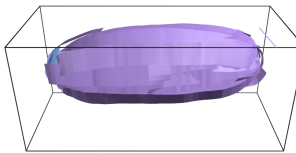Torus

5.46 minutes

6.23 minutes

Ease of Use: 2 (Probably GravitySketch)
Output Quality: 2 (Probably GravitySketch)
Effectiveness: 2 (Probably GravitySketch)
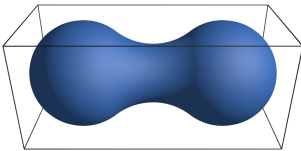Preference: 2 (Probably GravitySketch)
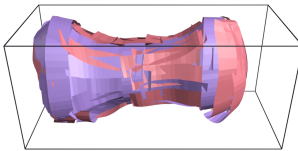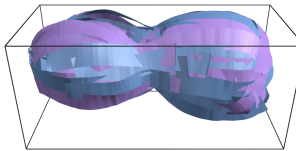
Ellipsoid

31.54 minutes

8.88 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 2 (Probably GravitySketch)
Effectiveness: 4 (Probably AdaptiBrush)
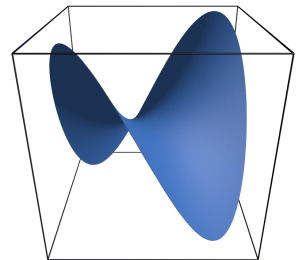Preference: 4 (Probably AdaptiBrush)
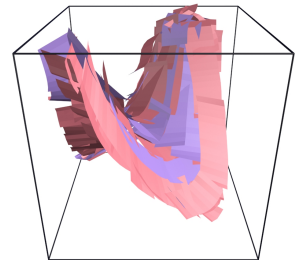
Metaball

10.57 minutes
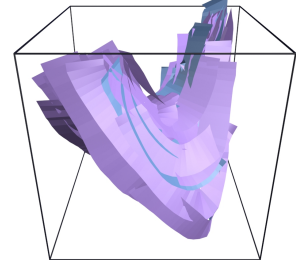
9.36 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 3 (Both are Equal)

Hyperbolic paraboloid

7.58 minutes

11.13 minutes

Ease of Use: 2 (Probably GravitySketch)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 2 (Probably GravitySketch)
Preference: 3 (Both are Equal)

GravitySketch
Tool order: 0

AdaptiBrush
Tool order: 1

P7

Practice: 16.81 min

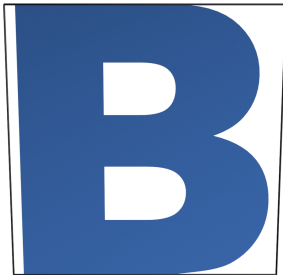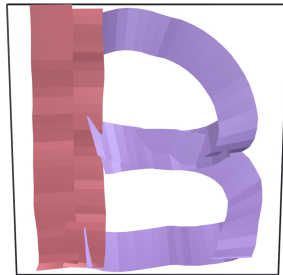**Practice: 5.92 min**

S

3.15 minutes
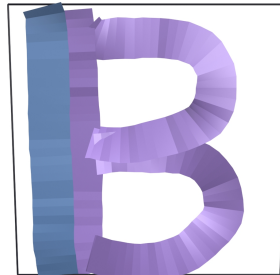
0.57 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
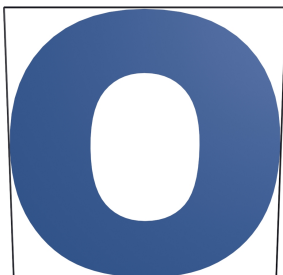Preference: 4 (Probably AdaptiBrush)
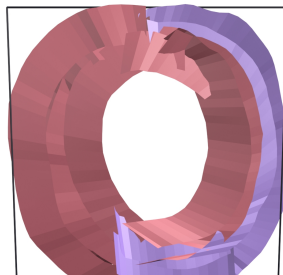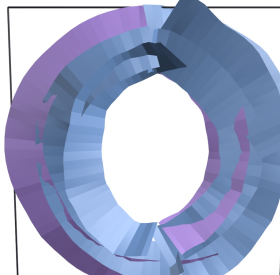
B

6.71 minutes

0.82 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
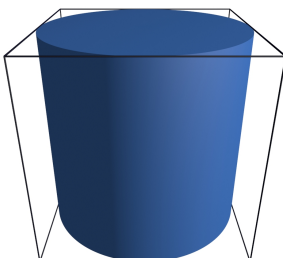Preference: 5 (Definitely AdaptiBrush)
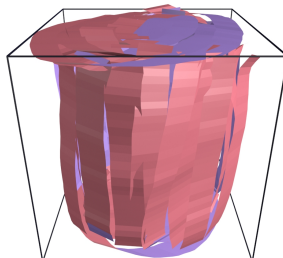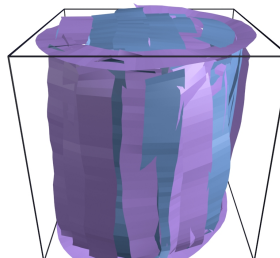
O

26.24 minutes

5.78 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 4 (Probably AdaptiBrush)

Cylinder
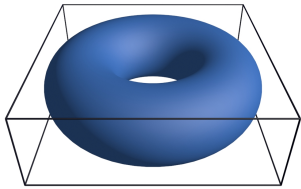
4.23 minutes

3.63 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 4 (Probably AdaptiBrush)
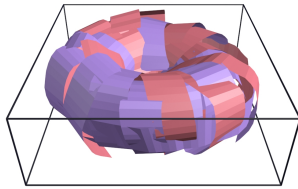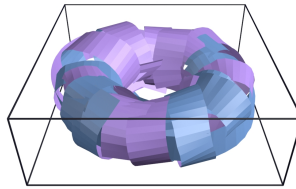
P7

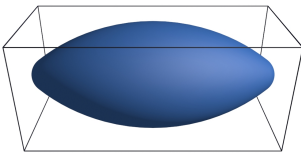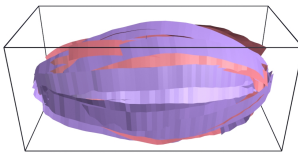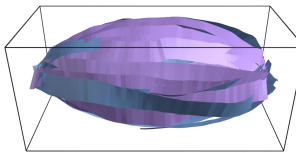|	**GravitySketch** **Tool order: 0**	**AdaptiBrush** **Tool order: 1**	

Torus

6.48 minutes

5.97 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 4 (Probably AdaptiBrush)
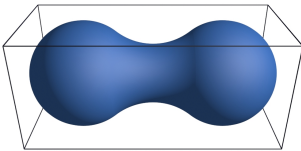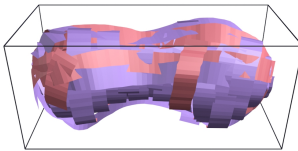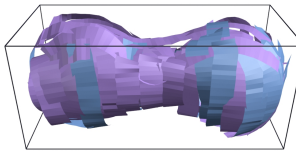
Ellipsoid

9.44 minutes

9.47 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
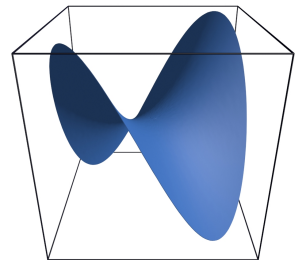Preference: 4 (Probably AdaptiBrush)
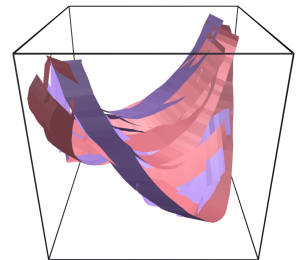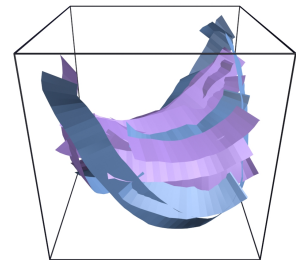
Metaball

22.67 minutes

17.16 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)

Hyperbolic paraboloid

6.76 minutes

4.37 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 3 (Both are Equal)
Preference: 4 (Probably AdaptiBrush)

P8

GravitySketch
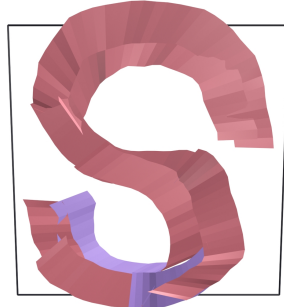Tool order: 0

AdaptiBrush
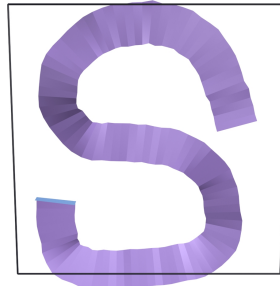Tool order: 1

Practice: 6.67 min
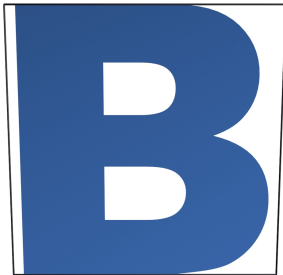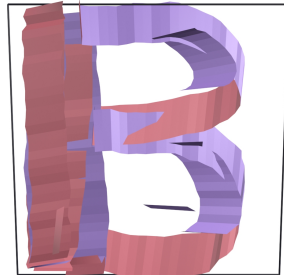
Practice: 4.54 min

S

S

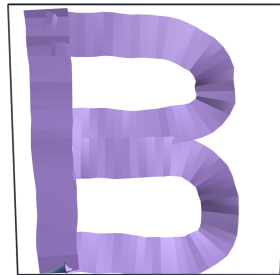1.46 minutes

0.63 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
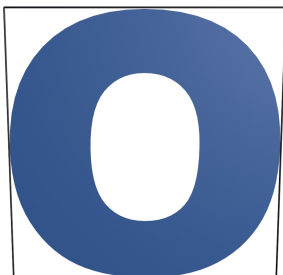Preference: 5 (Definitely AdaptiBrush)
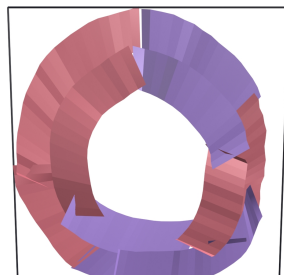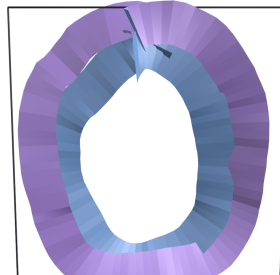
B

6.28 minutes

2.69 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
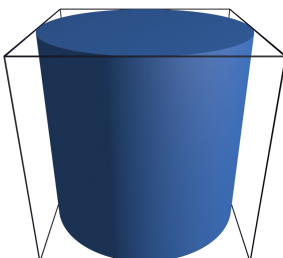Preference: 5 (Definitely AdaptiBrush)
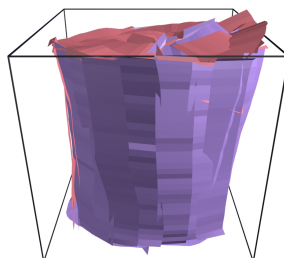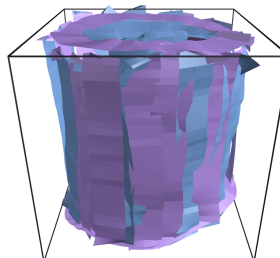
O

3.6 minutes

0.95 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 4 (Probably AdaptiBrush)

Cylinder
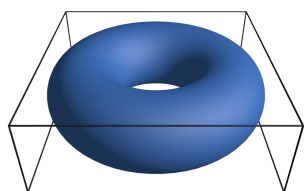
5.38 minutes

3.39 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 1 (Definitely GravitySketch)
Preference: 1 (Definitely GravitySketch)
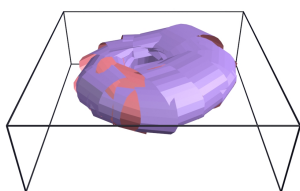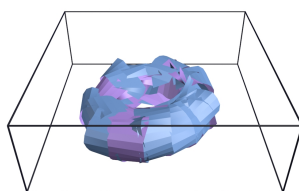
P8

GravitySketch
Tool order: 0

AdaptiBrush
Tool order: 1

Torus

11.08 minutes

3.81 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 1 (Definitely GravitySketch)
Effectiveness: 1 (Definitely GravitySketch)
Preference: 1 (Definitely GravitySketch)

Ellipsoid

5.3 minutes

7.02 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
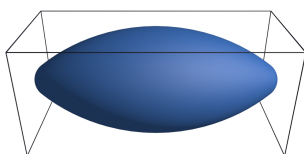Preference: 1 (Definitely GravitySketch)

Metaball

28.42 minutes

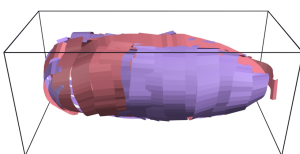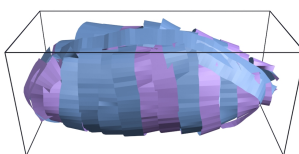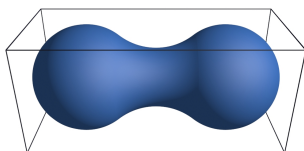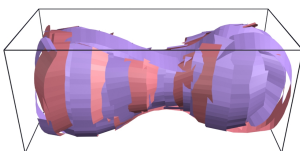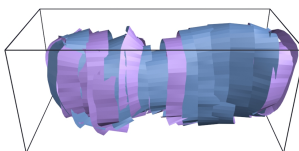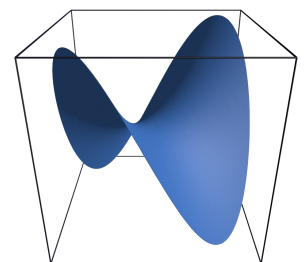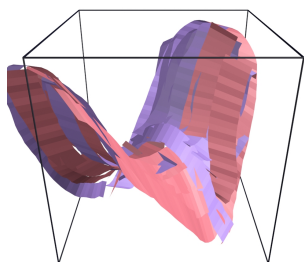6.18 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 1 (Definitely GravitySketch)
Effectiveness: 1 (Definitely GravitySketch)
Preference: 1 (Definitely GravitySketch)

Hyperbolic paraboloid

4.36 minutes
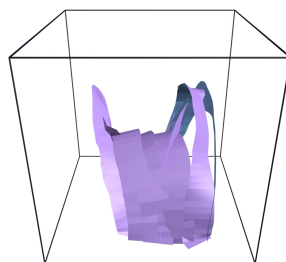
3.72 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 1 (Definitely GravitySketch)
Effectiveness: 1 (Definitely GravitySketch)
Preference: 1 (Definitely GravitySketch)

2

GravitySketch
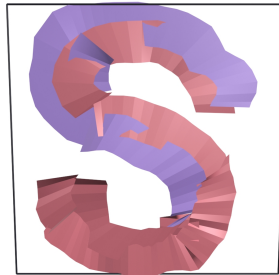**Tool order: 1**

AdaptiBrush
Tool order: 0

P9

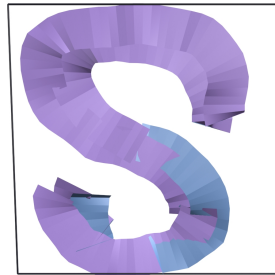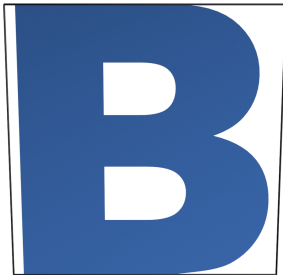**Practice: 3.31 min**

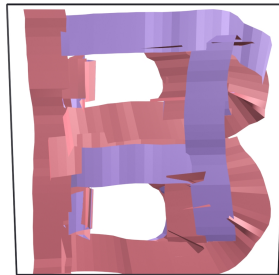**Practice: 5.53 min**

S

23.91 minutes
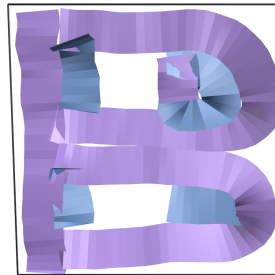
2.05 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 3 (Both are Equal)
Effectiveness: 2 (Probably GravitySketch)
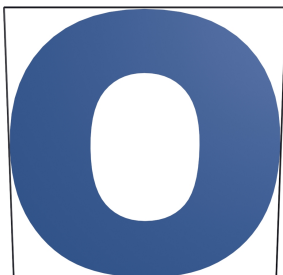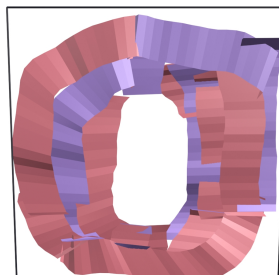Preference: 4 (Probably AdaptiBrush)
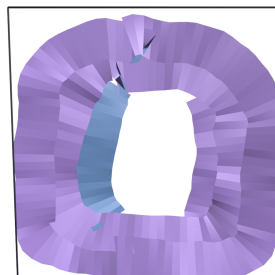
B

0.96 minutes

1.75 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 1 (Definitely GravitySketch)
Effectiveness: 1 (Definitely GravitySketch)
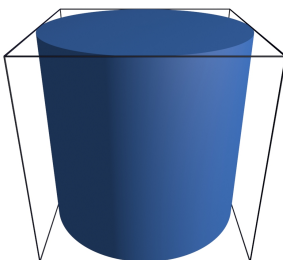Preference: 1 (Definitely GravitySketch)
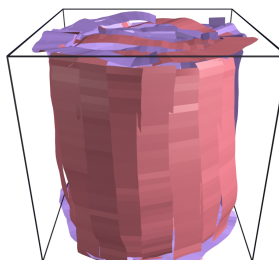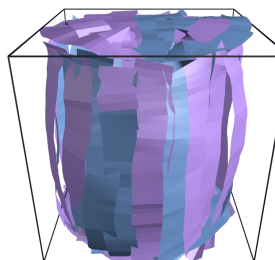
O

1.81 minutes

1.4 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)
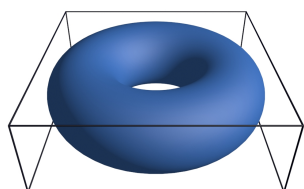
Cylinder

4.16 minutes

4.25 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 2 (Probably GravitySketch)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 2 (Probably GravitySketch)
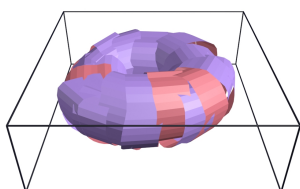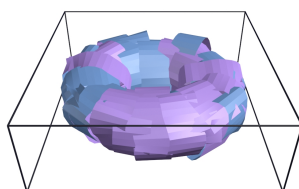
P9

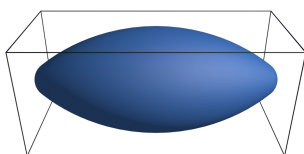|	**GravitySketch** **Tool order: 1**	**AdaptiBrush** **Tool order: 0**	

Torus

GravitySketch: 24.58 minutes

AdaptiBrush: 3.22 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 1 (Definitely GravitySketch)
Effectiveness: 1 (Definitely GravitySketch)
Preference: 1 (Definitely GravitySketch)

Ellipsoid

GravitySketch: 5.29 minutes

AdaptiBrush: 2.03 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 2 (Probably GravitySketch)

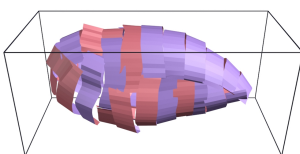Metaball

GravitySketch: 8.73 minutes

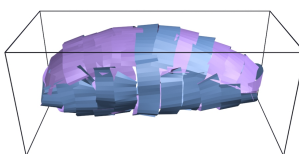AdaptiBrush: 2.3 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 1 (Definitely GravitySketch)
Effectiveness: 1 (Definitely GravitySketch)
Preference: 1 (Definitely GravitySketch)
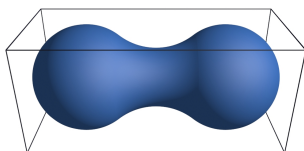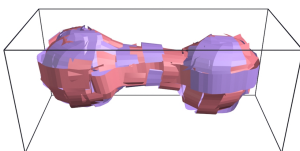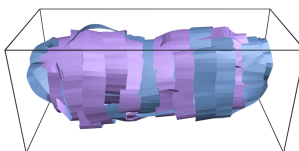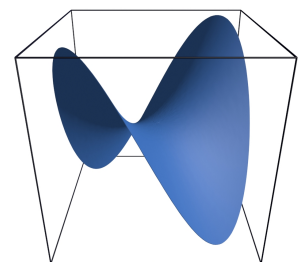
Hyperbolic paraboloid
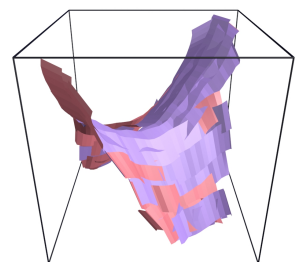
GravitySketch: 2.5 minutes

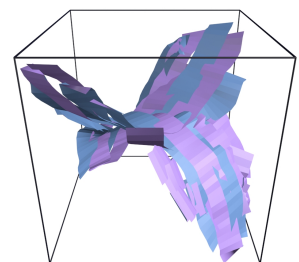AdaptiBrush: 9.41 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 1 (Definitely GravitySketch)
Effectiveness: 1 (Definitely GravitySketch)
Preference: 1 (Definitely GravitySketch)

GravitySketch
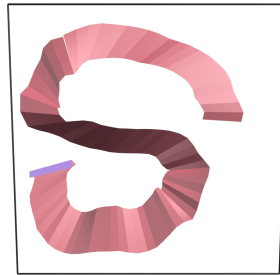Tool order: 1

AdaptiBrush
Tool order: 0

P10

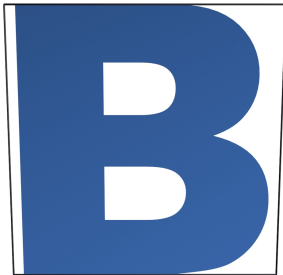Practice: **7.9 min** Practice: **8.73 min**
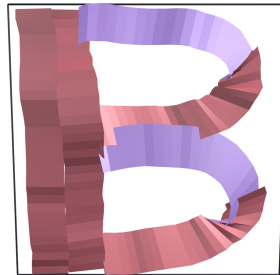
S

S 3.44 minutes 6.81 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
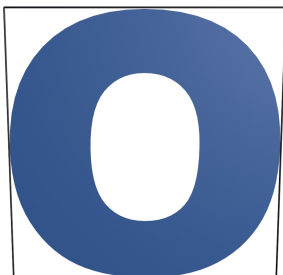Preference: 5 (Definitely AdaptiBrush)
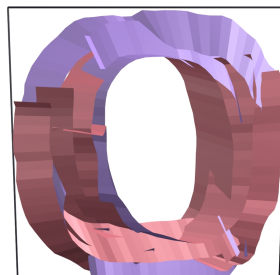
B

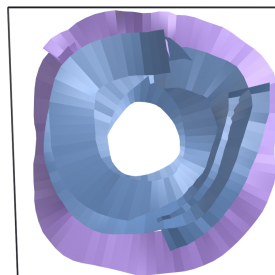B 2.05 minutes 3.59 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)
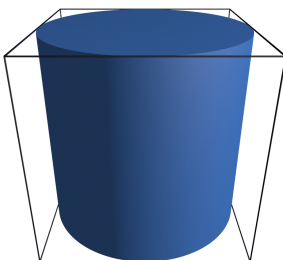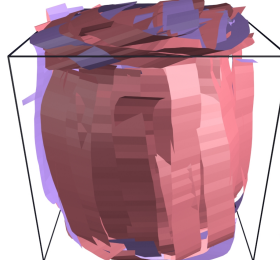
O

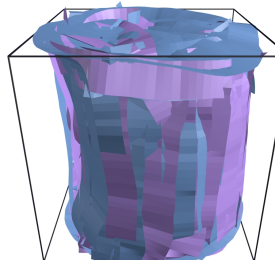O 5.55 minutes 12.28 minutes

Ease of Use: 2 (Probably GravitySketch)
Output Quality: 2 (Probably GravitySketch)
Effectiveness: 2 (Probably GravitySketch)
Preference: 3 (Both are Equal)

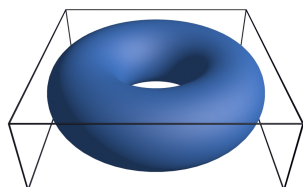Cylinder 17.54 minutes 10.1 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
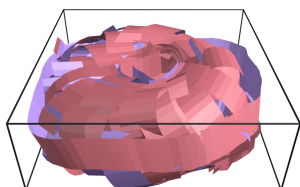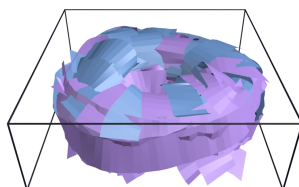Preference: 5 (Definitely AdaptiBrush)

P10

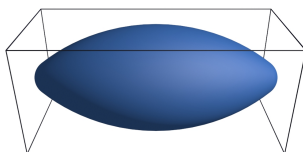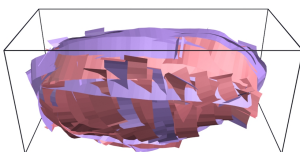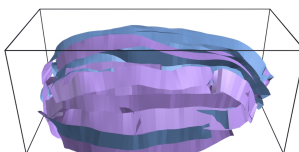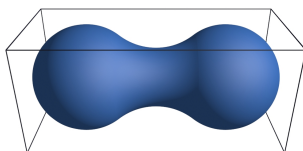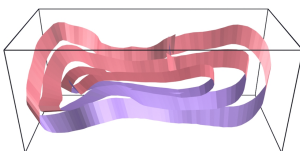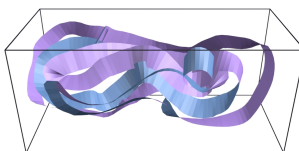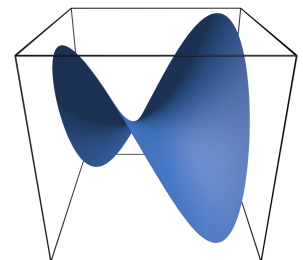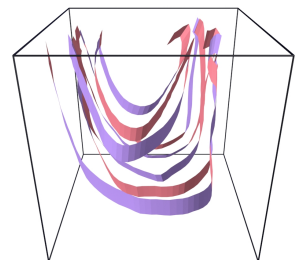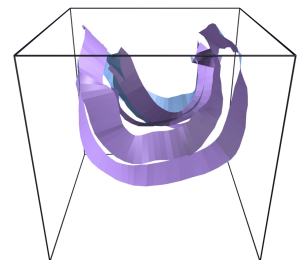|	**GravitySketch** **Tool order: 1**	**AdaptiBrush** **Tool order: 0**	
Torus	9.6 minutes	13.15 minutes	Ease of Use: 4 (Probably AdaptiBrush) Output Quality: 5 (Definitely AdaptiBrush) Effectiveness: 5 (Definitely AdaptiBrush) Preference: 5 (Definitely AdaptiBrush)
Ellipsoid	10.17 minutes	21.63 minutes	Ease of Use: 4 (Probably AdaptiBrush) Output Quality: 5 (Definitely AdaptiBrush) Effectiveness: 4 (Probably AdaptiBrush) Preference: 4 (Probably AdaptiBrush)
Metaball	0.58 minutes	1.24 minutes	Ease of Use: 4 (Probably AdaptiBrush) Output Quality: 4 (Probably AdaptiBrush) Effectiveness: 5 (Definitely AdaptiBrush) Preference: 5 (Definitely AdaptiBrush)
Hyperbolic paraboloid	1.79 minutes	8.72 minutes	Ease of Use: 4 (Probably AdaptiBrush) Output Quality: 4 (Probably AdaptiBrush) Effectiveness: 4 (Probably AdaptiBrush) Preference: 5 (Definitely AdaptiBrush)

GravitySketch
Tool order: 1

AdaptiBrush
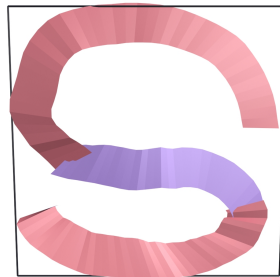**Tool order: 0**

P11

Practice: 4.53 min

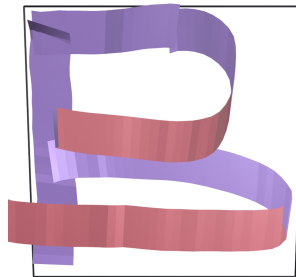**Practice: 4.49 min**

S

0.48 minutes
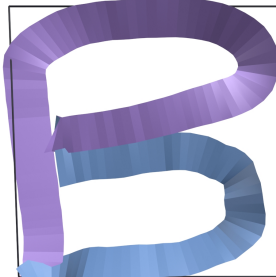
0.99 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 3 (Both are Equal)
Effectiveness: 5 (Definitely AdaptiBrush)
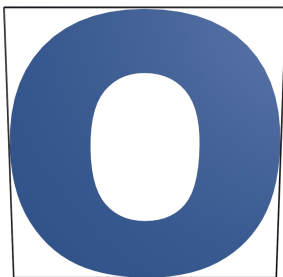Preference: 5 (Definitely AdaptiBrush)
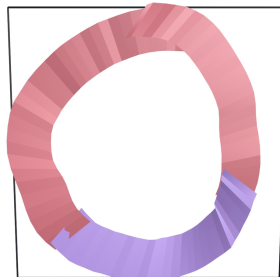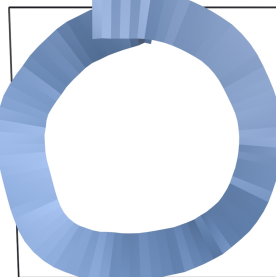
B

1.0 minutes

1.73 minutes

Ease of Use: 3 (Both are Equal)
Output Quality: 3 (Both are Equal)
Effectiveness: 3 (Both are Equal)
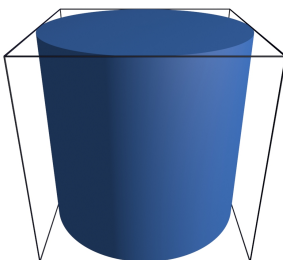Preference: 4 (Probably AdaptiBrush)
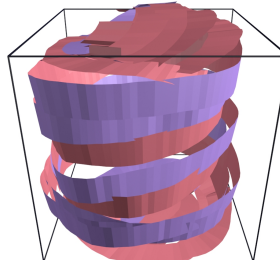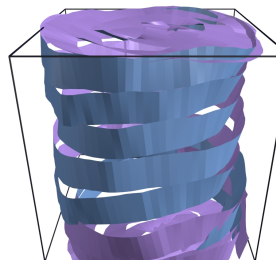
O

0.5 minutes

0.84 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)
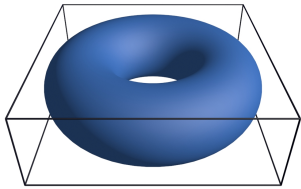
Cylinder

5.57 minutes

8.38 minutes

Ease of Use: 3 (Both are Equal)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 3 (Both are Equal)
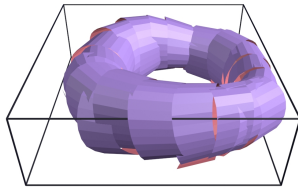
P11

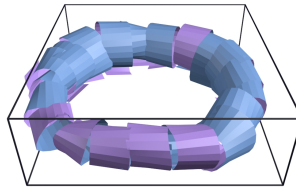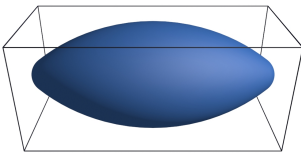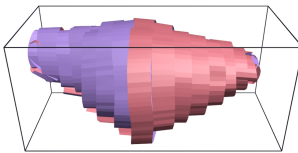|	**GravitySketch** **Tool order: 1**	**AdaptiBrush** **Tool order: 0**	

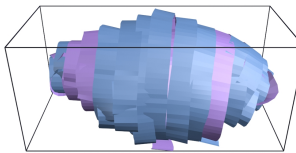**Torus** / 2.23 minutes / 5.48 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 1 (Definitely GravitySketch)
Effectiveness: 1 (Definitely GravitySketch)
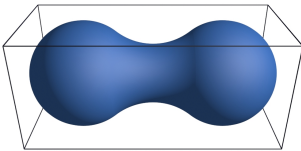Preference: 1 (Definitely GravitySketch)
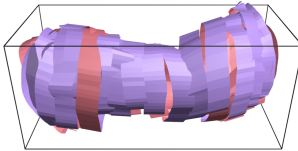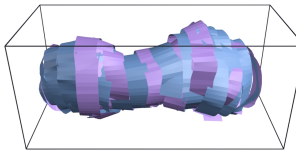
Ellipsoid / 2.23 minutes / 2.64 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 3 (Both are Equal)
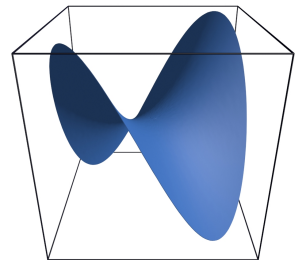Preference: 3 (Both are Equal)
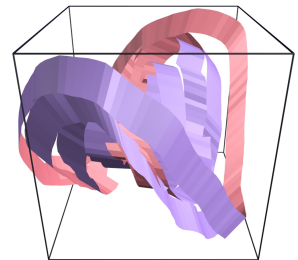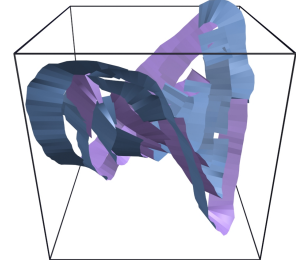
Metaball / 2.89 minutes / 4.93 minutes

Ease of Use: 2 (Probably GravitySketch)
Output Quality: 2 (Probably GravitySketch)
Effectiveness: 3 (Both are Equal)
Preference: 3 (Both are Equal)

Hyperbolic paraboloid / 3.66 minutes / 4.39 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 4 (Probably AdaptiBrush)

GravitySketch
Tool order: 1

AdaptiBrush
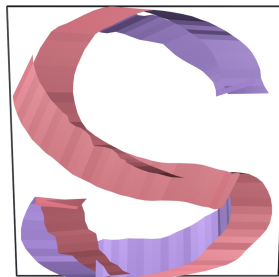**Tool order: 0**

P12

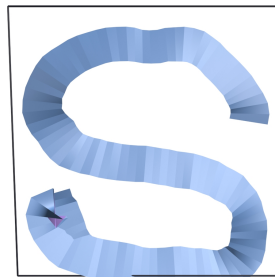Practice: **18.67 min**

Practice: **26.26 min**

S

5.66 minutes
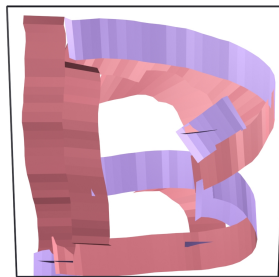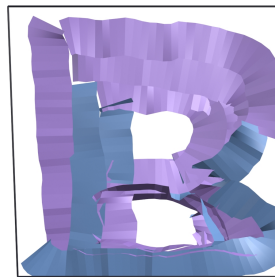
6.1 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
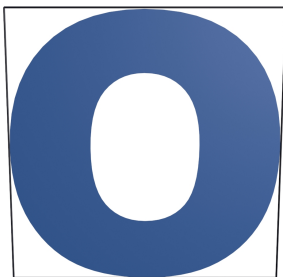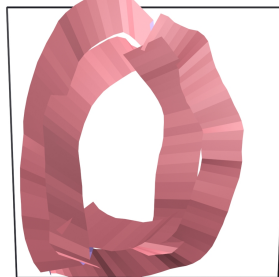Preference: 5 (Definitely AdaptiBrush)

B

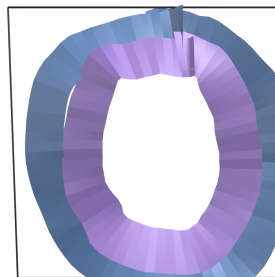0.85 minutes

5.34 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 1 (Definitely GravitySketch)
Effectiveness: 1 (Definitely GravitySketch)
Preference: 1 (Definitely GravitySketch)
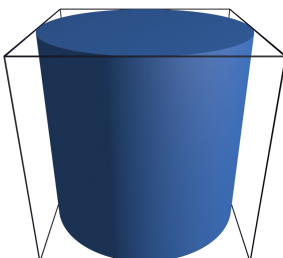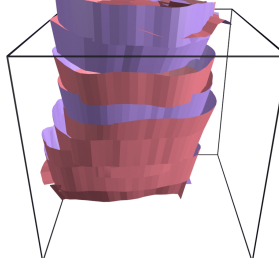
O

0.64 minutes

0.36 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)

Cylinder
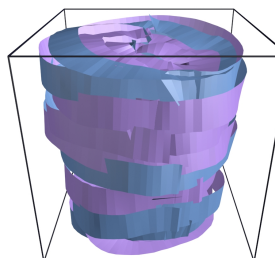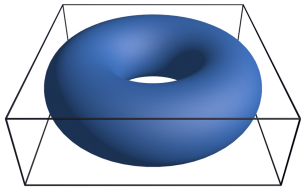
15.73 minutes

17.76 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)

P12

GravitySketch
Tool order: 1

AdaptiBrush
Tool order: 0

Torus

27.76 minutes

34.36 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)
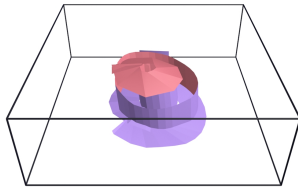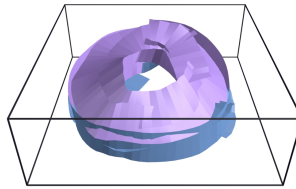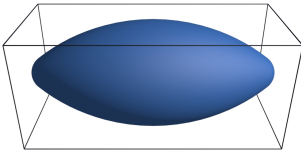
Ellipsoid

2.79 minutes

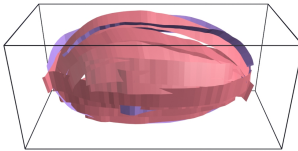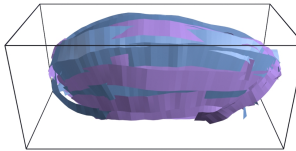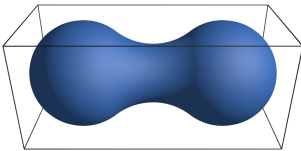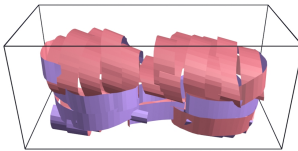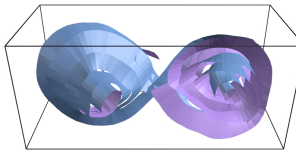2.89 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)
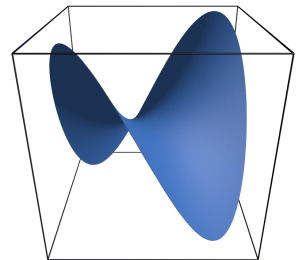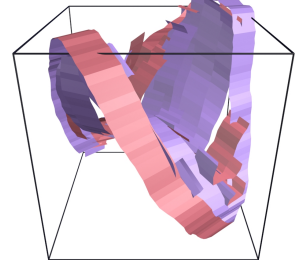
Metaball

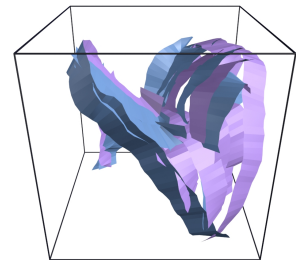5.75 minutes

1.25 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 4 (Probably AdaptiBrush)

Hyperbolic paraboloid

4.9 minutes

13.16 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 1 (Definitely GravitySketch)
Effectiveness: 1 (Definitely GravitySketch)
Preference: 1 (Definitely GravitySketch)

GravitySketch
Tool order: 1

AdaptiBrush
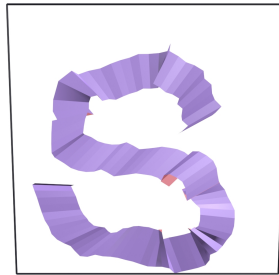**Tool order: 0**

P13

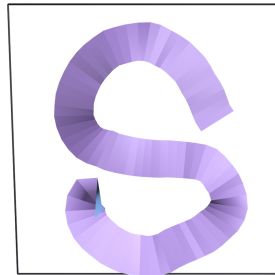**Practice: 5.65 min**

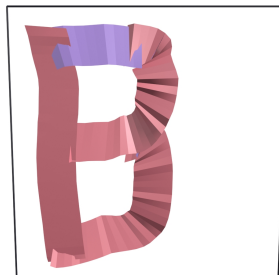**Practice: 5.89 min**

S

S

5.4 minutes
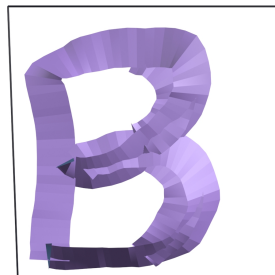
7.28 minutes

Ease of Use: 3 (Both are Equal)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 3 (Both are Equal)
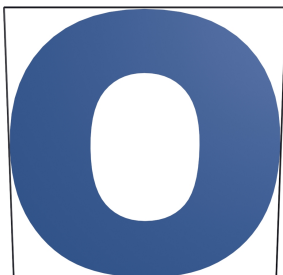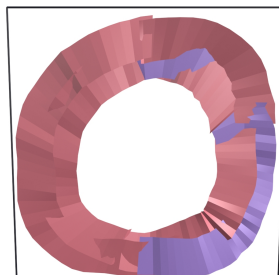Preference: 3 (Both are Equal)

B

B

2.48 minutes

6.75 minutes
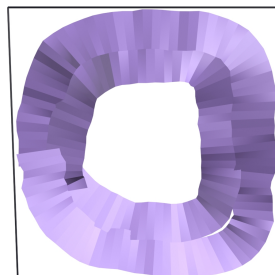
Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 3 (Both are Equal)
Effectiveness: 3 (Both are Equal)
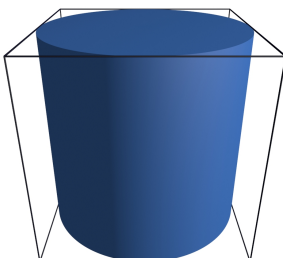Preference: 4 (Probably AdaptiBrush)
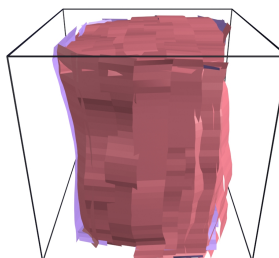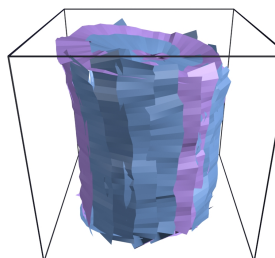
O

O

8.0 minutes

9.22 minutes

Ease of Use: 2 (Probably GravitySketch)
Output Quality: 1 (Definitely GravitySketch)
Effectiveness: 2 (Probably GravitySketch)
Preference: 2 (Probably GravitySketch)
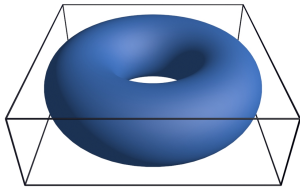
Cylinder

10.67 minutes

14.38 minutes

Ease of Use: 3 (Both are Equal)
Output Quality: 3 (Both are Equal)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 3 (Both are Equal)
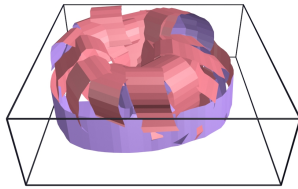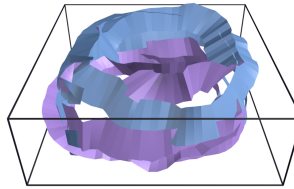
P13

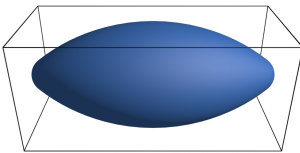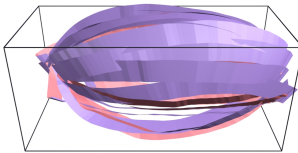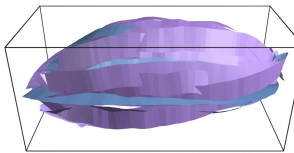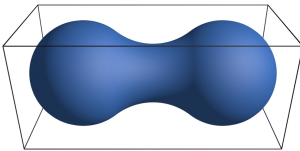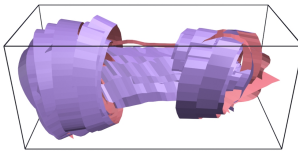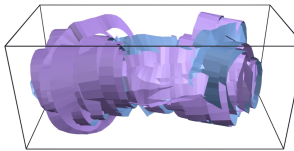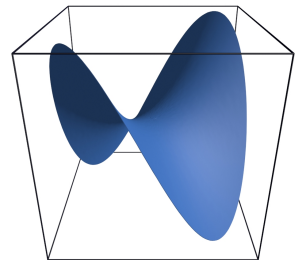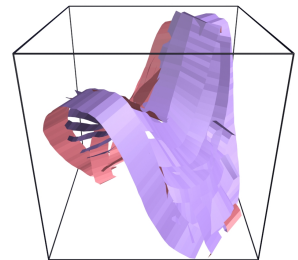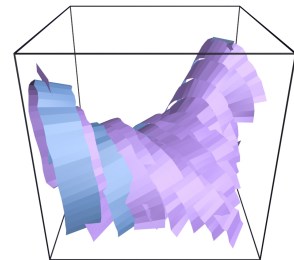|	**GravitySketch** Tool order: 1	**AdaptiBrush** Tool order: 0	
Torus	7.14 minutes	12.95 minutes	Ease of Use: 1 (Definitely GravitySketch) Output Quality: 2 (Probably GravitySketch) Effectiveness: 2 (Probably GravitySketch) Preference: 1 (Definitely GravitySketch)
Ellipsoid	2.5 minutes	4.21 minutes	Ease of Use: 4 (Probably AdaptiBrush) Output Quality: 4 (Probably AdaptiBrush) Effectiveness: 3 (Both are Equal) Preference: 4 (Probably AdaptiBrush)
Metaball	3.48 minutes	4.72 minutes	Ease of Use: 4 (Probably AdaptiBrush) Output Quality: 3 (Both are Equal) Effectiveness: 3 (Both are Equal) Preference: 4 (Probably AdaptiBrush)
Hyperbolic paraboloid	5.01 minutes	9.81 minutes	Ease of Use: 2 (Probably GravitySketch) Output Quality: 3 (Both are Equal) Effectiveness: 2 (Probably GravitySketch) Preference: 1 (Definitely GravitySketch)

2

GravitySketch
Tool order: 1

AdaptiBrush
Tool order: 0

P14

Practice: 7.6 min

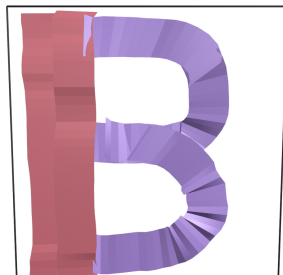**Practice: 4.58 min**

S

1.06 minutes
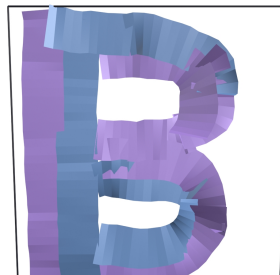
2.76 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)
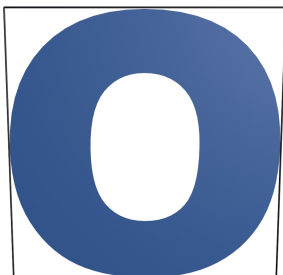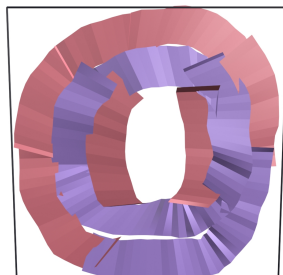
B

1.8 minutes
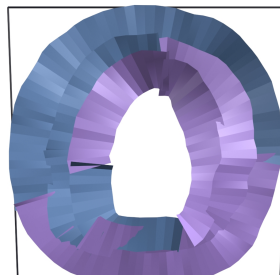
1.46 minutes

Ease of Use: 2 (Probably GravitySketch)
Output Quality: 2 (Probably GravitySketch)
Effectiveness: 2 (Probably GravitySketch)
Preference: 2 (Probably GravitySketch)
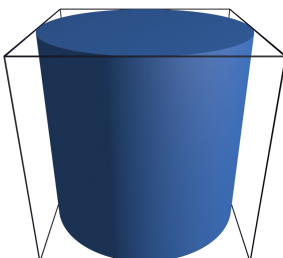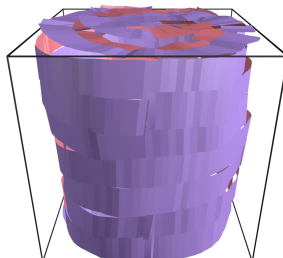
O

3.8 minutes
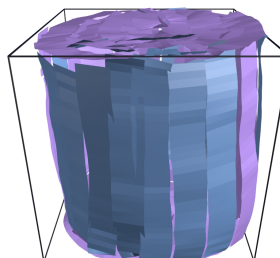
2.05 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 5 (Definitely AdaptiBrush)

Cylinder
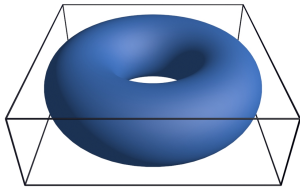
7.21 minutes

14.21 minutes

Ease of Use: 2 (Probably GravitySketch)
Output Quality: 2 (Probably GravitySketch)
Effectiveness: 2 (Probably GravitySketch)
Preference: 2 (Probably GravitySketch)
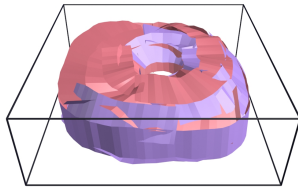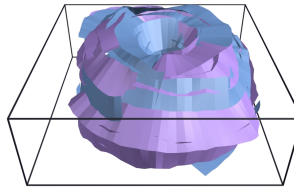
P14

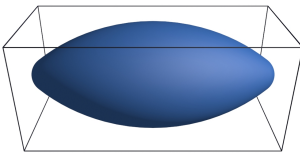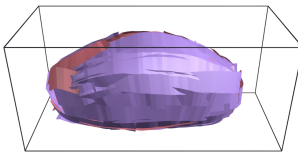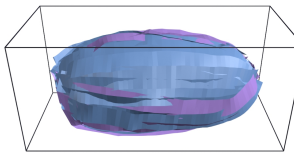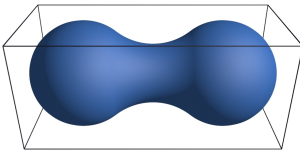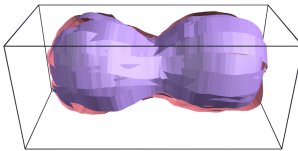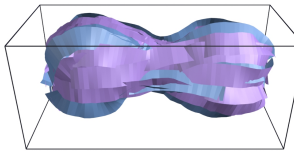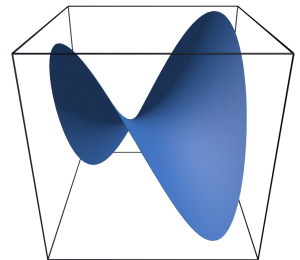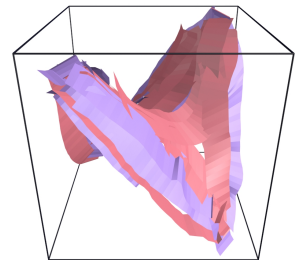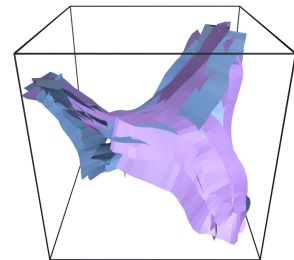|	**GravitySketch** **Tool order: 1**	**AdaptiBrush** **Tool order: 0**	
Torus	3.77 minutes	5.89 minutes	Ease of Use: 1 (Definitely GravitySketch) Output Quality: 2 (Probably GravitySketch) Effectiveness: 1 (Definitely GravitySketch) Preference: 1 (Definitely GravitySketch)
Ellipsoid	7.16 minutes	10.91 minutes	Ease of Use: 2 (Probably GravitySketch) Output Quality: 2 (Probably GravitySketch) Effectiveness: 4 (Probably AdaptiBrush) Preference: 4 (Probably AdaptiBrush)
Metaball	4.23 minutes	3.81 minutes	Ease of Use: 1 (Definitely GravitySketch) Output Quality: 2 (Probably GravitySketch) Effectiveness: 1 (Definitely GravitySketch) Preference: 1 (Definitely GravitySketch)
Hyperbolic paraboloid	1.92 minutes	3.98 minutes	Ease of Use: 4 (Probably AdaptiBrush) Output Quality: 4 (Probably AdaptiBrush) Effectiveness: 4 (Probably AdaptiBrush) Preference: 3 (Both are Equal)

GravitySketch
Tool order: 1

AdaptiBrush
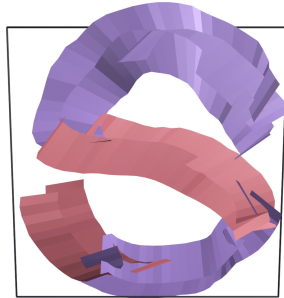**Tool order: 0**

P15

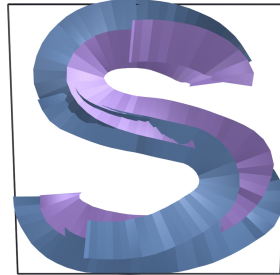Practice: **15.94 min**

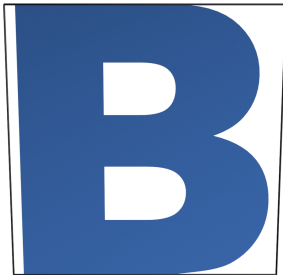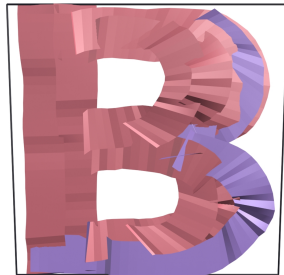Practice: **8.78 min**

S

2.66 minutes

2.17 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
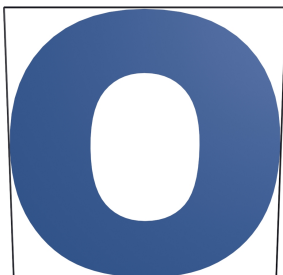Preference: 5 (Definitely AdaptiBrush)

B
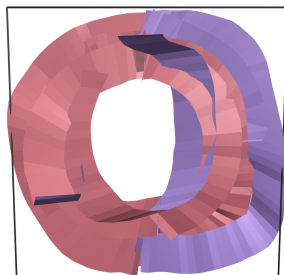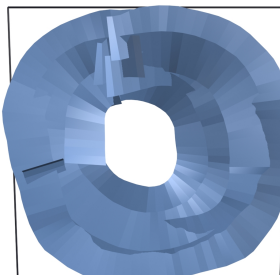
1.83 minutes

3.81 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 1 (Definitely GravitySketch)
Effectiveness: 2 (Probably GravitySketch)
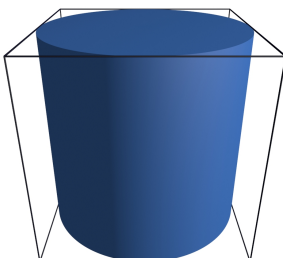Preference: 2 (Probably GravitySketch)
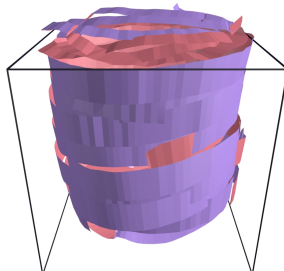
O

9.85 minutes

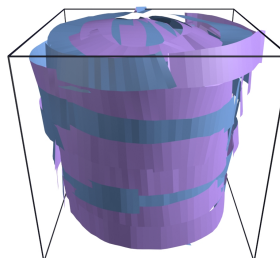2.74 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 5 (Definitely AdaptiBrush)
Preference: 4 (Probably AdaptiBrush)

Cylinder

2.23 minutes
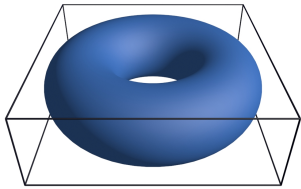
7.97 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 4 (Probably AdaptiBrush)
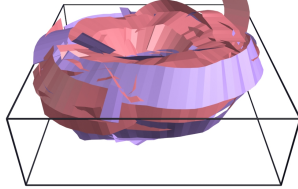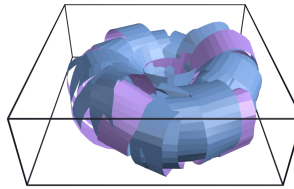
P15

GravitySketch
Tool order: 1

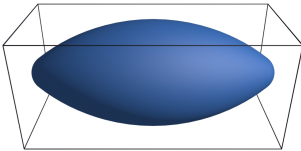**AdaptiBrush**
Tool order: 0

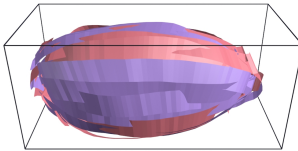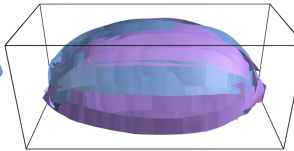Torus

6.48 minutes

16.22 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
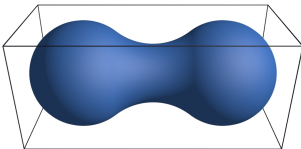Preference: 5 (Definitely AdaptiBrush)

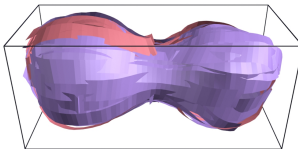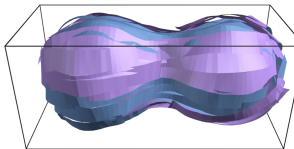Ellipsoid

10.06 minutes

14.75 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
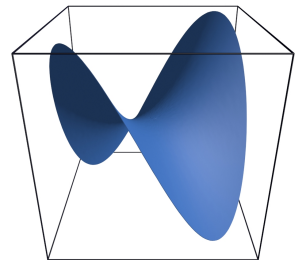Preference: 4 (Probably AdaptiBrush)
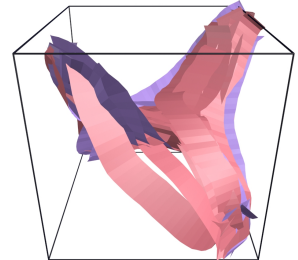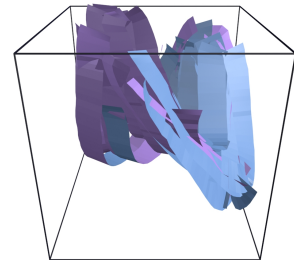
Metaball

18.88 minutes

36.06 minutes

Ease of Use: 2 (Probably GravitySketch)
Output Quality: 5 (Definitely AdaptiBrush)
Effectiveness: 1 (Definitely GravitySketch)
Preference: 1 (Definitely GravitySketch)

Hyperbolic paraboloid

3.18 minutes

6.89 minutes

Ease of Use: 5 (Definitely AdaptiBrush)
Output Quality: 2 (Probably GravitySketch)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 4 (Probably AdaptiBrush)

2

GravitySketch
Tool order: 1
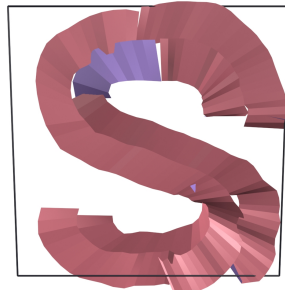
AdaptiBrush
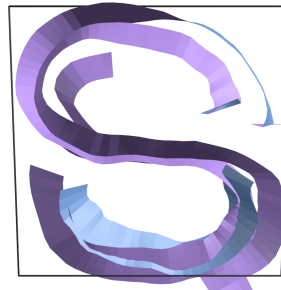**Tool order: 0**

P16

Practice: **3.17 min**

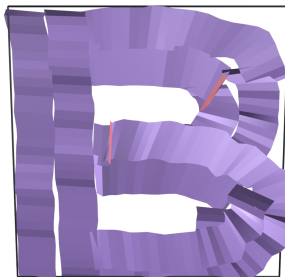Practice: **3.21 min**

S

0.6 minutes

0.45 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 1 (Definitely GravitySketch)
Effectiveness: 1 (Definitely GravitySketch)
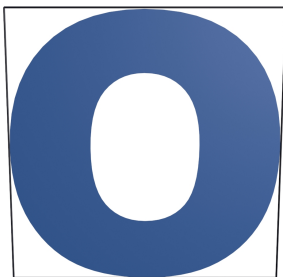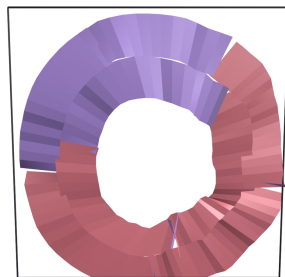Preference: 1 (Definitely GravitySketch)
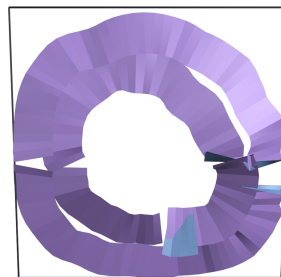
B

1.08 minutes

1.3 minutes

Ease of Use: 2 (Probably GravitySketch)
Output Quality: 2 (Probably GravitySketch)
Effectiveness: 2 (Probably GravitySketch)
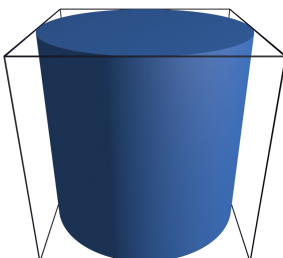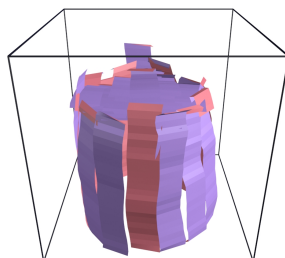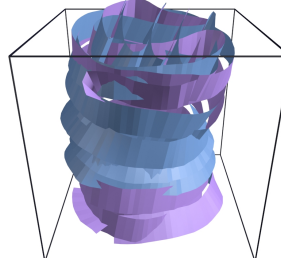Preference: 2 (Probably GravitySketch)

O

1.0 minutes

0.53 minutes

Ease of Use: 1 (Definitely GravitySketch)
Output Quality: 2 (Probably GravitySketch)
Effectiveness: 2 (Probably GravitySketch)
Preference: 2 (Probably GravitySketch)
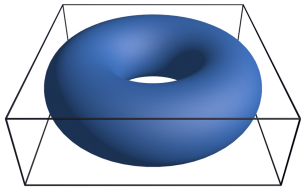
Cylinder

1.12 minutes

0.66 minutes

Ease of Use: 2 (Probably GravitySketch)
Output Quality: 1 (Definitely GravitySketch)
Effectiveness: 1 (Definitely GravitySketch)
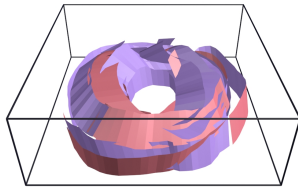Preference: 2 (Probably GravitySketch)
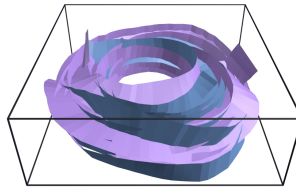
P16

GravitySketch
Tool order: 1

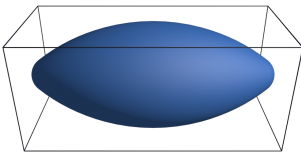**AdaptiBrush**
Tool order: 0

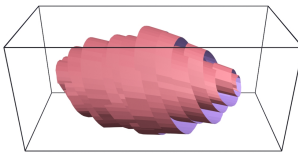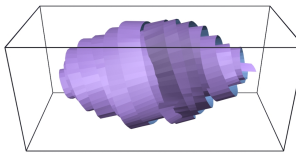Torus

1.1 minutes

0.67 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 2 (Probably GravitySketch)
Effectiveness: 4 (Probably AdaptiBrush)
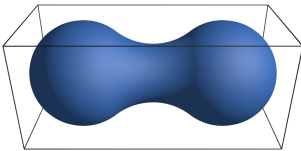Preference: 4 (Probably AdaptiBrush)

Ellipsoid
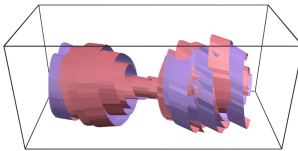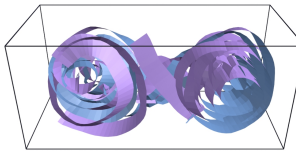
0.27 minutes

2.45 minutes

Ease of Use: 3 (Both are Equal)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 4 (Probably AdaptiBrush)
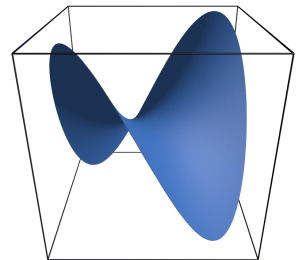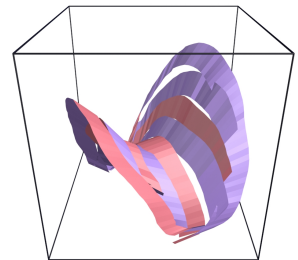
Metaball

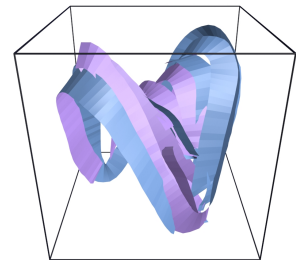1.64 minutes

1.18 minutes

Ease of Use: 4 (Probably AdaptiBrush)
Output Quality: 4 (Probably AdaptiBrush)
Effectiveness: 4 (Probably AdaptiBrush)
Preference: 4 (Probably AdaptiBrush)

Hyperbolic paraboloid

0.52 minutes

0.82 minutes

Ease of Use: 2 (Probably GravitySketch)
Output Quality: 2 (Probably GravitySketch)
Effectiveness: 1 (Definitely GravitySketch)
Preference: 2 (Probably GravitySketch)