

A.1

$$y = -\frac{1}{2}(3(x + 2)) - 4$$

A.2

$$y = \left| -\frac{3}{4}(x + 1) \right| + 7$$

A.3

$$y = \frac{1}{4} \left(\frac{1}{2}(x - 6) \right)^2 + 3$$

A.4

$$y = -|2(x - 6)|$$

A.5

$$y = 4(-2(x - 3)) + 5$$

A.6

$$y = 5 \left(\frac{1}{4}(x + 6) \right)^3 + 2$$

A.7

$$y = 4(x - 6)^2 - 1$$

A.8

$$y = \frac{3}{4}(x - 2)^2 - 5$$

A.9

$$y = 3 \left| -\frac{1}{2}x \right| + 8$$

A.10

$$y = -\frac{1}{2}(-3(x + 5))^3 - 8$$

Reflect over y-axis
Horizontal stretch
Left 1
Up 7

Reflect over x-axis
Vertical shrink
Horizontal shrink
Left 2
Down 4

Reflect over x-axis
Horizontal shrink
Right 6

Vertical shrink
Horizontal stretch
Right 6
Up 3

Vertical stretch
Horizontal stretch
Left 6
Up 2

Vertical stretch
Reflect over y-axis
Horizontal shrink
Right 3
Up 5

Vertical shrink
Right 2
Down 5

Vertical stretch
Right 6
Down 1

Reflect over x-axis
Vertical shrink
Reflect over y-axis
Horizontal shrink
Left 5
Down 8

Vertical stretch
Reflect over y-axis
Horizontal stretch
Up 8

B.1

$$y = 6 \left(\frac{1}{2} (x + 4) \right)^3 + 5$$

B.2

$$y = \frac{4}{3} (x - 5)^2 - 2$$

B.3

$$y = 2(-3(x - 5)) + 4$$

B.4

$$y = -\frac{1}{8} (-2(x + 3))^3 - 5$$

B.5

$$y = 8 \left| -\frac{1}{3} x \right| + 2$$

B.6

$$y = 6(x - 1)^2 - 4$$

B.7

$$y = \left| -\frac{4}{3} (x + 7) \right| + 1$$

B.8

$$y = -\frac{1}{3} (2(x + 4)) - 2$$

B.9

$$y = \frac{1}{3} \left(\frac{1}{6} (x - 2) \right)^2 + 4$$

B.10

$$y = -|6(x - 2)|$$

Vertical stretch
Right 5
Down 2

Vertical stretch
Horizontal stretch
Left 4
Up 5

Reflect over x-axis
Vertical shrink
Reflect over y-axis
Horizontal shrink
Left 3
Down 5

Vertical stretch
Reflect over y-axis
Horizontal shrink
Right 5
Up 4

Vertical stretch
Right 1
Down 4

Vertical stretch
Reflect over y-axis
Horizontal shrink
Up 2

Reflect over x-axis
Vertical shrink
Horizontal shrink
Left 4
Down 2

Reflect over y-axis
Horizontal shrink
Left 7
Up 1

Reflect over x-axis
Horizontal shrink
Right 2

Vertical shrink
Horizontal stretch
Right 2
Up 4