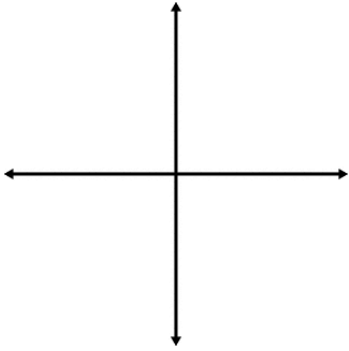


Transformations

$$y = a(x - h)^2 + k$$



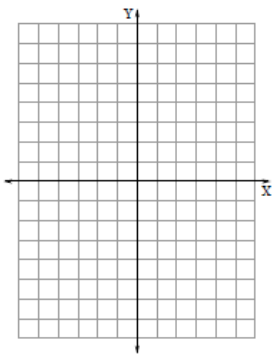
a : _____

h : _____

k : _____

Quadratic

Graph: $y = \frac{3}{4}(x + 1)^2 - 8$

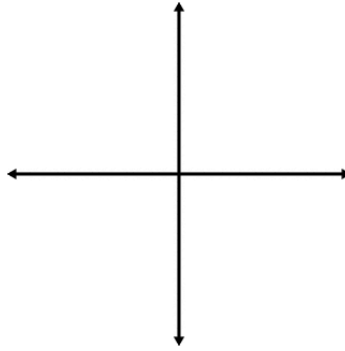


Domain: _____

Range: _____

Transformations:

$$y = a\sqrt{x - h} + k$$



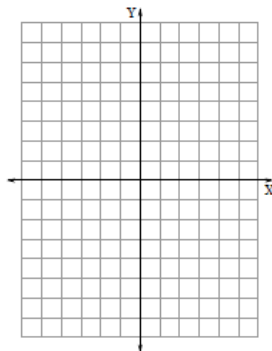
a : _____

h : _____

k : _____

Radical

Graph: $y = 2\sqrt{x + 5} - 1$

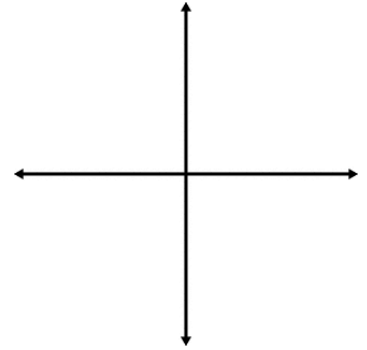


Domain: _____

Range: _____

Transformations:

$$y = a|x - h| + k$$



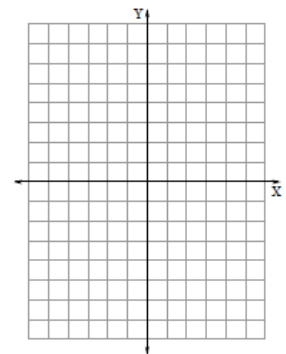
a : _____

h : _____

k : _____

Absolute Value

Graph: $y = -\frac{3}{2}|x - 3| + 7$



Domain: _____

Range: _____

Transformations:

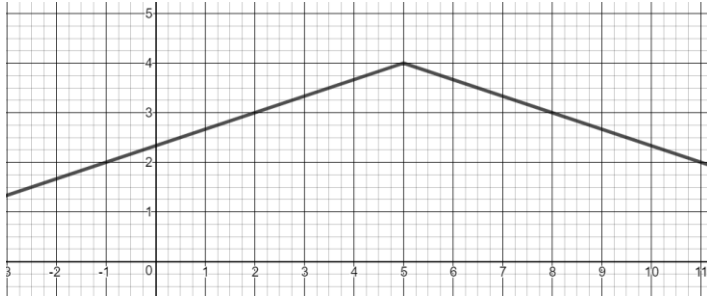
Practice With Transformations

Given the equation, describe the transformations.

Equation	Transformation
1. $y = \sqrt{x - 2} + 5$	
2. $y = - x - 7 + 9$	
3. $y = 5(x - 9)^2 + 3$	
4. $y = \frac{1}{2} x + 10 - 8$	
5. $y = -3\sqrt{x - 1} + 11$	
6. $y = -\frac{2}{3}(x + 8)^2 - 12$	
7. $y = -6 x + 1 $	
8. $y = \frac{1}{4}\sqrt{x} - 6$	

Given the graph, write the equation and describe the transformations.

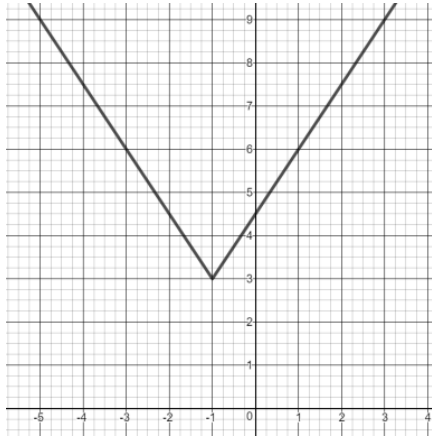
9.



Equation:

Transformations:

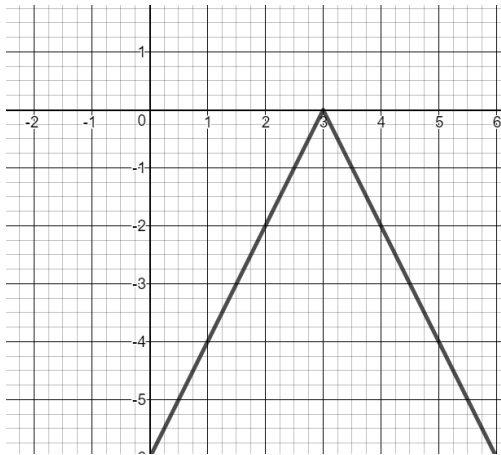
10.



Equation:

Transformations:

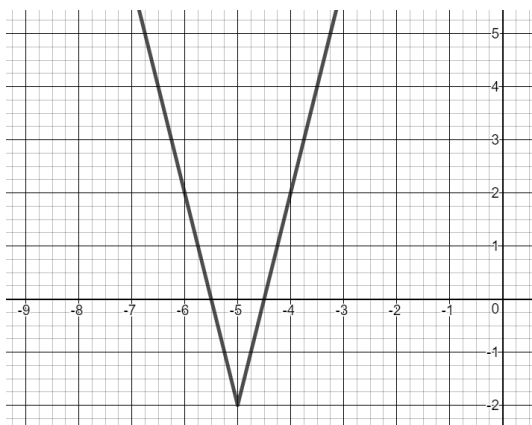
11.



Equation:

Transformations:

12.



Equation:

Transformations:

Given the transformations, write the equation.

<p>13. Quadratic Horizontal Translation (HT): 4 Vertical Dilation (VD): 8 Vertical Translation (VT): -2</p> <p>Equation:</p>	<p>14. Radical Vertical Translation (VT): 5 Horizontal Translation (HT): -2</p> <p>Equation:</p>
<p>15. Absolute Value Vertical Dilation (VD): 3 Vertical Translation (VT): 4 Reflection</p> <p>Equation:</p>	<p>16. Radical Reflection Horizontal Translation (HT): 9 Vertical Translation (VT): -14 Vertical Dilation (VD): $\frac{1}{2}$</p> <p>Equation:</p>
<p>17. Quadratic Horizontal Translation (HT): -15 Vertical Dilation (VD): $\frac{5}{6}$</p> <p>Equation:</p>	<p>18. Absolute Value Vertical Translation (VT): 1 Horizontal Translation (HT): 10 Vertical Dilation (VD): $\frac{1}{5}$</p> <p>Equation:</p>
<p>19. Radical Vertical Dilation (VD): 4 Reflection Vertical Translation (VT): 2 Horizontal Translation (HT): 1</p> <p>Equation:</p>	<p>20. Quadratic Horizontal Translation (HT): -17 Vertical Translation (VT): -41</p> <p>Equation:</p>