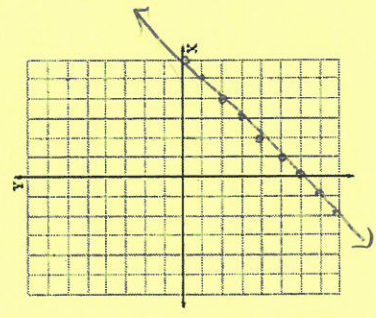
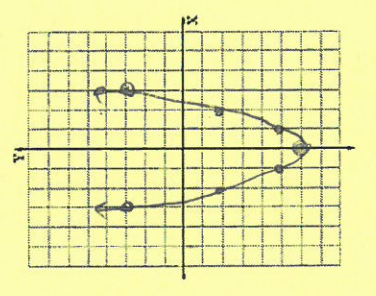
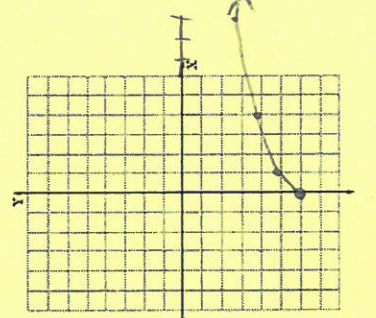
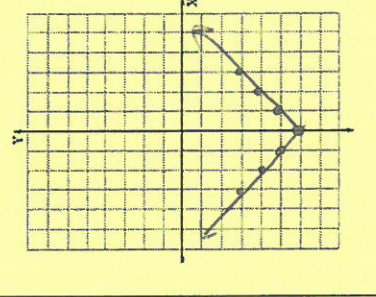


Key

$y = 1(x-6)$   
 $y = 1(x-0) - 6$

Family	Linear	Quadratic	Radical	Absolute Value																																								
Example	$y =  x - 6 $ $1(x-0) - 6$	$y =  x^2 - 6 $ $1(x-0)^2 - 6$	$y = \sqrt{x} - 6$ $1\sqrt{x-0} - 6$	$y =   x  - 6 $ $1 x-0  - 6$																																								
Table of Values	<table border="1"> <tr><th>x</th><th>y</th></tr> <tr><td>0</td><td>-6</td></tr> <tr><td>1</td><td>-5</td></tr> <tr><td>2</td><td>-4</td></tr> <tr><td>3</td><td>-3</td></tr> </table>	x	y	0	-6	1	-5	2	-4	3	-3	<table border="1"> <tr><th>x</th><th>y</th></tr> <tr><td>0</td><td>-6</td></tr> <tr><td>1</td><td>-5</td></tr> <tr><td>2</td><td>-4</td></tr> <tr><td>3</td><td>-3</td></tr> </table>	x	y	0	-6	1	-5	2	-4	3	-3	<table border="1"> <tr><th>x</th><th>y</th></tr> <tr><td>0</td><td>-6</td></tr> <tr><td>1</td><td>-5</td></tr> <tr><td>4</td><td>-4</td></tr> <tr><td>9</td><td>-3</td></tr> </table>	x	y	0	-6	1	-5	4	-4	9	-3	<table border="1"> <tr><th>x</th><th>y</th></tr> <tr><td>0</td><td>-6</td></tr> <tr><td>1</td><td>-5</td></tr> <tr><td>2</td><td>-4</td></tr> <tr><td>3</td><td>-3</td></tr> </table>	x	y	0	-6	1	-5	2	-4	3	-3
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Transformation

$\downarrow 6$   
 VT - 6

$\downarrow 6$   
 VT - 6

$\downarrow 6$   
 VT - 6

$\downarrow 6$   
 VT - 6

$$-2(x-2.5)$$

$$-2(x-0)+5$$

Family	Linear	Quadratic	Radical	Absolute Value																																										
Example	$y = -2x + 5$ $-2(x-0) + 5$	$y = -2x^2 + 5$ $-2(x-0)^2 + 5$	$y = -2\sqrt{x} + 5$ $-2\sqrt{x-0} + 5$	$y = -2 x  + 5$ $-2 x-0  + 5$																																										
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Transformation	↑ 5 VT Refl X VD Dilate 2 (slope)	↑ 5 VT Refl X VD Dilate 2 (narrower)	↑ 5 VT Refl X VD Dilate 2 (wider)	↑ 5 VT Refl X VD Dilate 2 (slope -2)																																										

$\frac{1}{2}(x-6)$   
 $\frac{1}{2}(x-0)-3$

Family	Linear	Quadratic	Radical	Absolute Value																																						
Example	$y = \frac{1}{2}x - 3$	$y = \frac{1}{2}(x-3)^2 + 0$	$y = \frac{1}{2}\sqrt{x-3} + 0$	$y = \frac{1}{2} x-3  + 0$																																						
Table of Values	<table border="1"> <thead> <tr><th>x</th><th>y</th></tr> </thead> <tbody> <tr><td>0</td><td>-3</td></tr> <tr><td>2</td><td>-2</td></tr> <tr><td>4</td><td>-1</td></tr> <tr><td>6</td><td>0</td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </tbody> </table>	x	y	0	-3	2	-2	4	-1	6	0					<table border="1"> <thead> <tr><th>x</th><th>y</th></tr> </thead> <tbody> <tr><td>3</td><td>0</td></tr> <tr><td>4</td><td>1/2</td></tr> <tr><td>7</td><td>1</td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </tbody> </table>	x	y	3	0	4	1/2	7	1					<table border="1"> <thead> <tr><th>x</th><th>y</th></tr> </thead> <tbody> <tr><td>3</td><td>0</td></tr> <tr><td>5</td><td>1</td></tr> <tr><td>7</td><td>2</td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </tbody> </table>	x	y	3	0	5	1	7	2					
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Transformation

↓ 3 VT  
 NO Dilate 1/2 (slope)

→ 3 HT  
 NO Dilate 1/2 (wide)

→ 3 HT  
 NO Dilate 1/2 (narrow)

→ 3 HT  
 NO Dilate 1/2 (slope)

$y = 3(x - \frac{2}{3})$   
 $\# y = 3(x - 0) - 2$

Family	Linear	Quadratic	Radical	Absolute Value																																						
Example	$y = 3x - 2$	$y = 3(x + 1)^2 - 2$	$y = 3\sqrt{x + 1} - 2$	$y = 3 x + 1  - 2$																																						
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Transformation

$\rightarrow 2$  VT  
 Dilation 3  
 (stretch)

$\rightarrow 2$  VT  
 $\leftarrow 1$  HT  
 Dilation 3  
 (narrow)

$\rightarrow 2$  VT  
 $\leftarrow 1$  HT  
 Dilation 3  
 (wide)

$\rightarrow 2$  VT  
 $\leftarrow 1$  HT  
 Dilation 3 (steep)