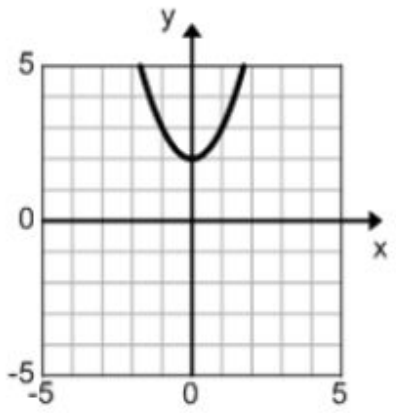
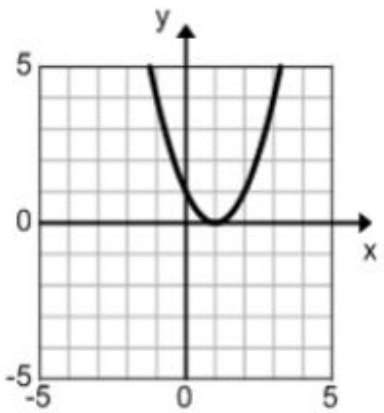
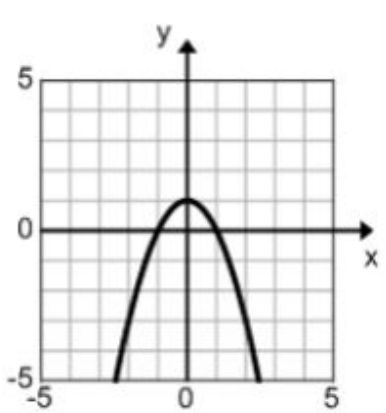
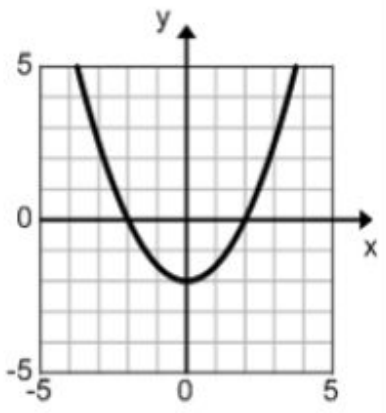
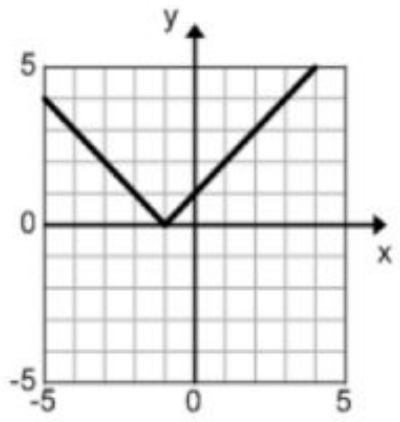
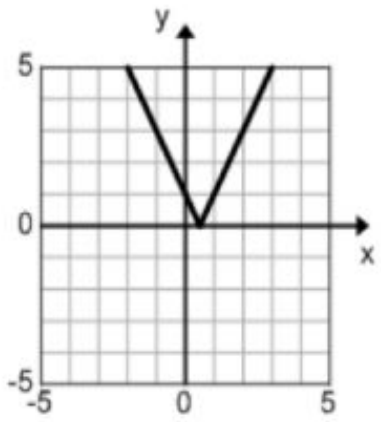
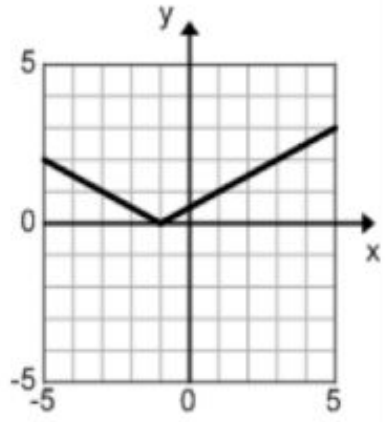
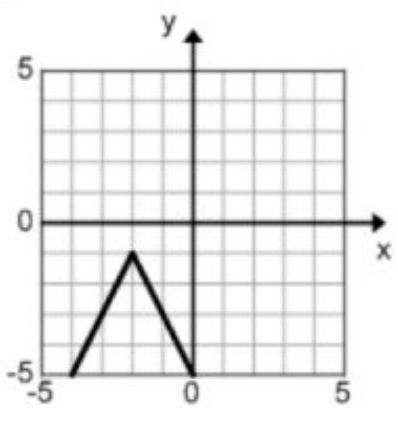
Type of Graph: Quadratic Function

Parent Function: $f(x) = x^2$

G6	G15	G3	G9
			
E1	E2	E3	E4
$f(x) = x^2 + 2$	$f(x) = (x - 1)^2$	$f(x) = -x^2 + 1$	$f(x) = \frac{1}{2}x^2 - 2$
D4	D3	D7	D9
• Vertical Shift: Up 2	• Horizontal Shift: Right 1	• Reflection across x-axis • Vertical Shift: Up 1	• Vertical Compression: $\frac{1}{2}$ • Vertical Shift: Down 2
Domain: All real #s Range: $y \geq 2$	Domain: All real #s Range: $y \geq 0$	Domain: All real #s Range: $y \leq 1$	Domain: All real #s Range: $y \geq -2$

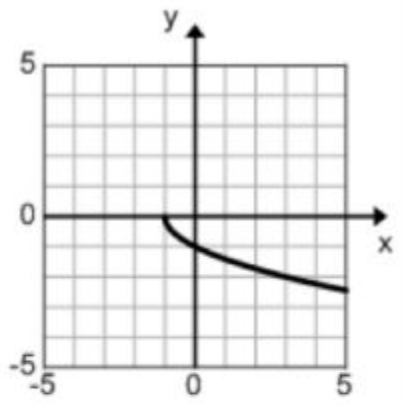
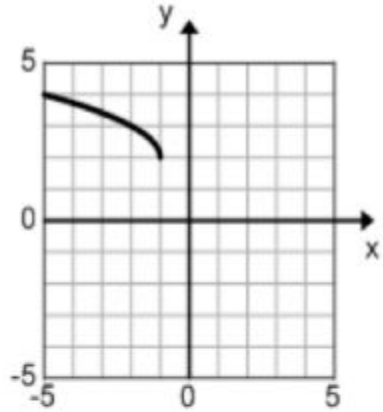
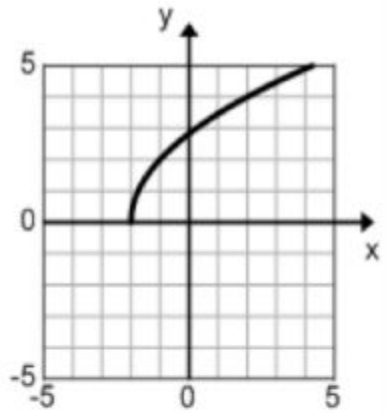
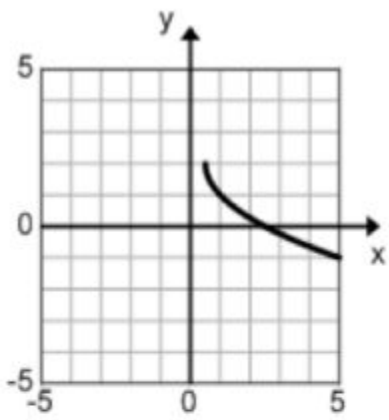
Type of Graph: Absolute Value Function

Parent Function: $f(x) = |x|$

G8	G14	G12	G2
			
E5	E6	E7	E8
$f(x) = \lvert x + 1 \rvert$	$f(x) = \lvert 2x - 1 \rvert$	$f(x) = \frac{1}{2} \lvert x + 1 \rvert$	$f(x) = -2 \lvert x + 2 \rvert - 2$
D14	D11	D12	D16
• Horizontal Shift: Left 1	• Horizontal Compression: 2 • Horizontal Shift: Right 1	• Vertical Compression: $\frac{1}{2}$ • Horizontal Shift: Left 1	• Reflection across x-axis • Vertical Stretch: 2 • Horizontal Shift: Left 2 • Vertical Shift: Down 1
Domain: All real #s Range: $y \geq 0$	Domain: All real #s Range: $y \geq 0$	Domain: All real #s Range: $y \geq 0$	Domain: All real #s Range: $y \leq -1$

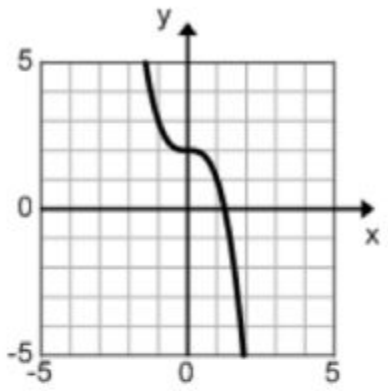
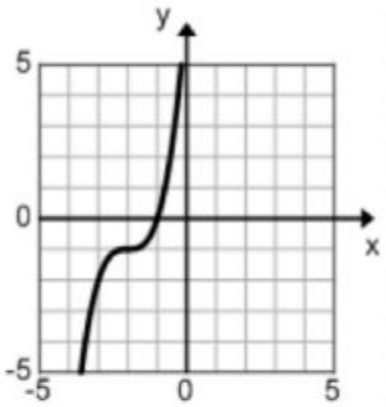
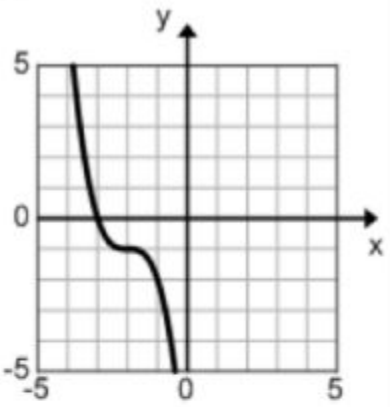
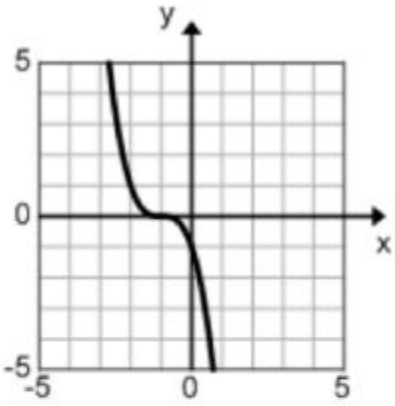
Type of Graph: Square Root Function

Parent Function: $f(x) = \sqrt{x}$

G1	G7	G11	G13
			
E9	E10	E11	E12
$f(x) = -\frac{1}{2}\sqrt{x+1}$	$f(x) = \sqrt{-x-1}+2$	$f(x) = 2\sqrt{x+2}$	$f(x) = -\sqrt{2x-1}+2$
D8	D10	D2	D5
• Reflection across x-axis • Horizontal Shift: Left 1	• Reflection across y-axis • Horizontal Shift: Right 1 • Vertical Shift: Up 2	• Vertical Stretch: 2 • Horizontal Shift: Left 2	• Reflection across x-axis • Horizontal Compression: 2 • Horizontal Shift: Right 1 • Vertical Shift: Up 2
Domain: $x \geq -1$ Range: $y \leq 0$	Domain: $x \leq -1$ Range: $y \geq 2$	Domain: $x \geq -2$ Range: $y \geq 0$	Domain: $x \geq 1/2$ Range: $y \leq 2$

Type of Graph: Cubic Function

Parent Function: $f(x) = x^3$

G4 	G5 	G16 	G10 
E13 $f(x) = -x^3 + 2$	E14 $f(x) = (x + 2)^3 - 3$	E15 $f(x) = -(x + 2)^3 - 1$	E16 $f(x) = (-x - 1)^3$
D15 • Reflection across x-axis • Vertical Shift: Up 2	D6 • Horizontal Shift: Left 2 • Vertical Shift: Down 1	D13 • Reflection across x-axis • Horizontal Shift: Left 2 • Vertical Shift: Down 1	D1 • Reflection across y-axis • Horizontal Shift: Left 1
Domain: All real #s Range: All real #s	Domain: All real #s Range: All real #s	Domain: All real #s Range: All real #s	Domain: All real #s Range: All real #s