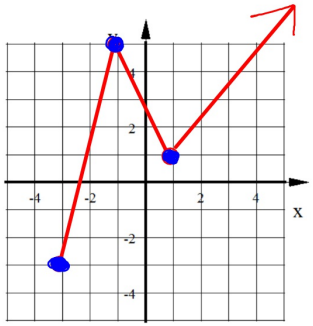
State the Domain and Range of this graph.

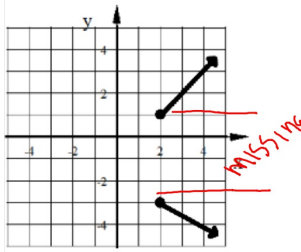


Domain

$x \geq -3$

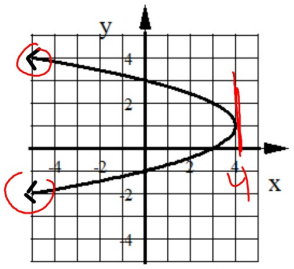
Range

$y \geq -3$



Domain: $x \geq 2$

Range: $y \geq 1$, $y \leq -3$



Domain: $x \leq 4$

Range: $\mathbb{R}$

Use these two functions:

$m(b) = 2b - 3$

$p(t) = t^2 + 5$

Find $5m(2) + 3p(1)$

$m(2) = 2(2) - 3$

$4 - 3$

$= 1$

$p(1) = 1^2 + 5$

$= 1 + 5$

$= 6$

$5(1) + 3(6)$

$5 + 18 = 23$

Use what you know about each equation to state what the shape of the graph will be and, if applicable, which way it opens.

$y = 3x^2 + 6x + 1$ Parabola that opens up

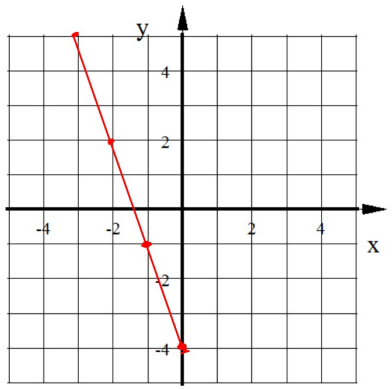
$y = -6x + 1$ Line that moves down 6 and right 1 starting from 1 on the y-axis

$y = -2|x + 1| - 5$ V-shape with Vertex at (-1,-5) Opens down and sides have a slope of 2 and -2

Graph this function with at least 3 points.

$y = \frac{-3x}{1} - 4$

3 Down / 1 RT or 3 up / 1 Left



Graph this function, use at least 5 points.

$y = -|x - 3| + 4$

3 RIGHT, 4 up

Vertex (3, 4)

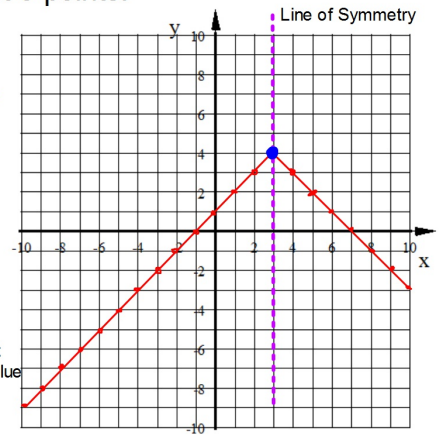
$m = \frac{-1}{1}$

x	y
4	3
5	2

For the table use x-values near the Vertex. After you plot these two points use the Line of Symmetry to find two more points.

Or

From the Vertex use the coefficient of the Absolute Value as the slope of the sides.



Graph this function, use at least 5 points.

$y = 2(x + 3)^2 - 7$

3 Left, 7 down

Vertex $(-3, -7)$

x	y
-2	-5
-1	1

For the table use x-values near the Vertex. After you plot these two points use the Line of Symmetry to find two more points.