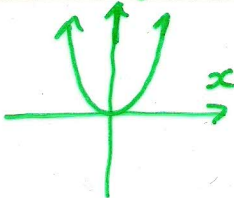
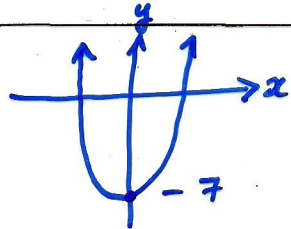
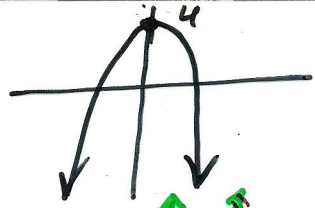
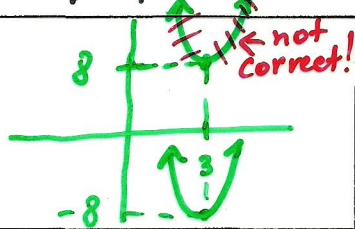
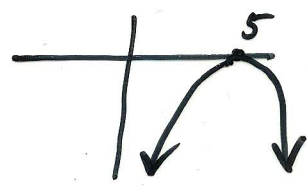
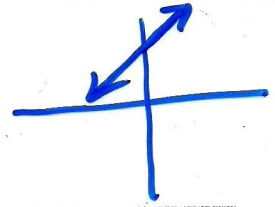
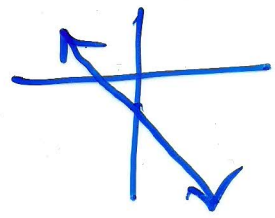


Use your knowledge of straight lines, parabolas and other relations which you have learned to graph in this course to complete the table below.

→ set of all used x-values

Relation	Diagram	Domain	Range
1. $y = x^2$ 		$x \in \mathbb{R}$ $D = \{x   x \in \mathbb{R}\}$	$y \geq 0$ $R = \{y   y \in \mathbb{R}, y \geq 0\}$
2. $y = x^2 - 7$ $y = (x - 0)^2 - 7$		$D = \{x   x \in \mathbb{R}\}$	$R = \{y   y \in \mathbb{R}, y \geq -7\}$ ← set of number ← such that variable ← condition
3. $y = -x^2 + 4$ $y = -(x - 0)^2 + 4$		$D = \{x   x \in \mathbb{R}\}$	$R = \{y   y \in \mathbb{R}, y \leq 4\}$
4. $y = (x - 3)^2 - 8$ vertex (3, 8) $a = 1 > 0$ opens upwards		$D = \{x   x \in \mathbb{R}\}$	$R = \{y   y \in \mathbb{R}, y \geq -8\}$
5. $y = -(x - 5)^2 + 0$ vertex (5, 0)		$D = \{x   x \in \mathbb{R}\}$	$R = \{y   y \in \mathbb{R}, y \leq 0\}$
6. $y = 2x + 5$		$D = \{x \in \mathbb{R}\}$	$R = \{y   y \in \mathbb{R}\}$ ← as long as $m \neq 0$ and as long as it's not a VL
7. $y = -8x - 1$		$D = \{x \in \mathbb{R}\}$	$R = \{y   y \in \mathbb{R}\}$