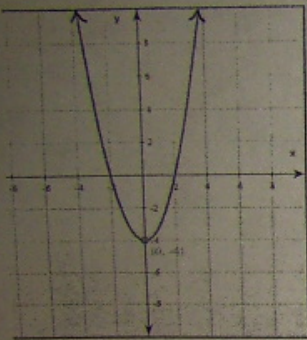


1. Determine the Domain and Range for each of the following: (The graphs count by twos.)

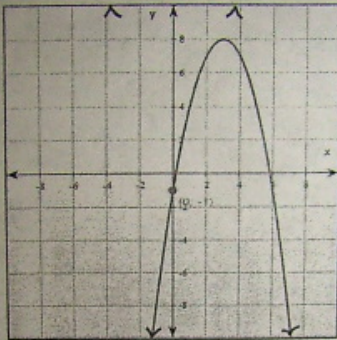


Domain:

$$\{x \mid -\infty \leq x \leq \infty, x \in \mathbb{R}\}$$

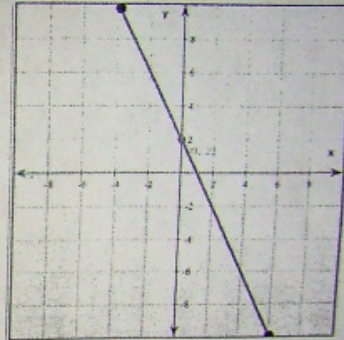
Range:

$$\{y \mid -4 \leq y \leq \infty, y \in \mathbb{R}\}$$



$$\{x \mid -\infty \leq x \leq \infty, x \in \mathbb{R}\}$$

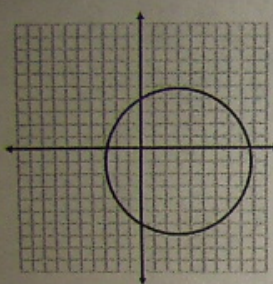
$$\{y \mid -\infty \leq y \leq 8, y \in \mathbb{R}\}$$



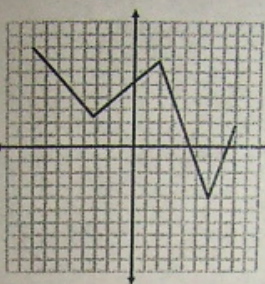
$$\{x \mid -4 \leq x \leq 6, x \in \mathbb{R}\}$$

$$\{y \mid -10 \leq y \leq 10, y \in \mathbb{R}\}$$

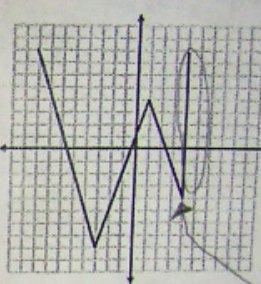
2. Determine if the following graphs are functions or non-functions.



Non-function



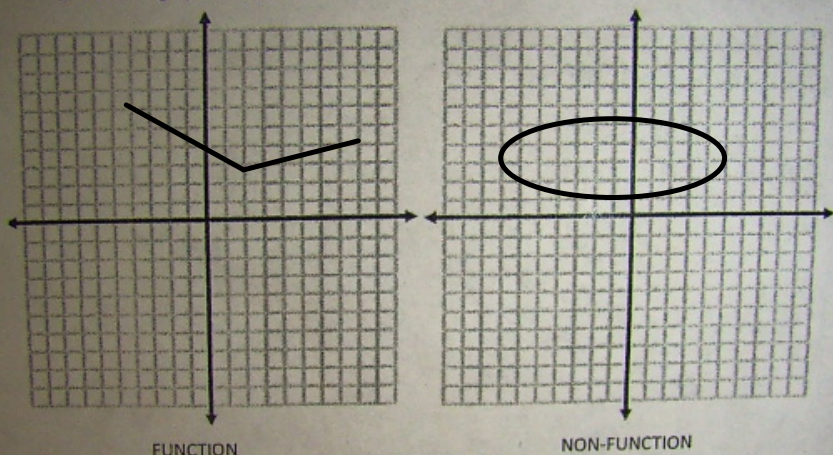
Function

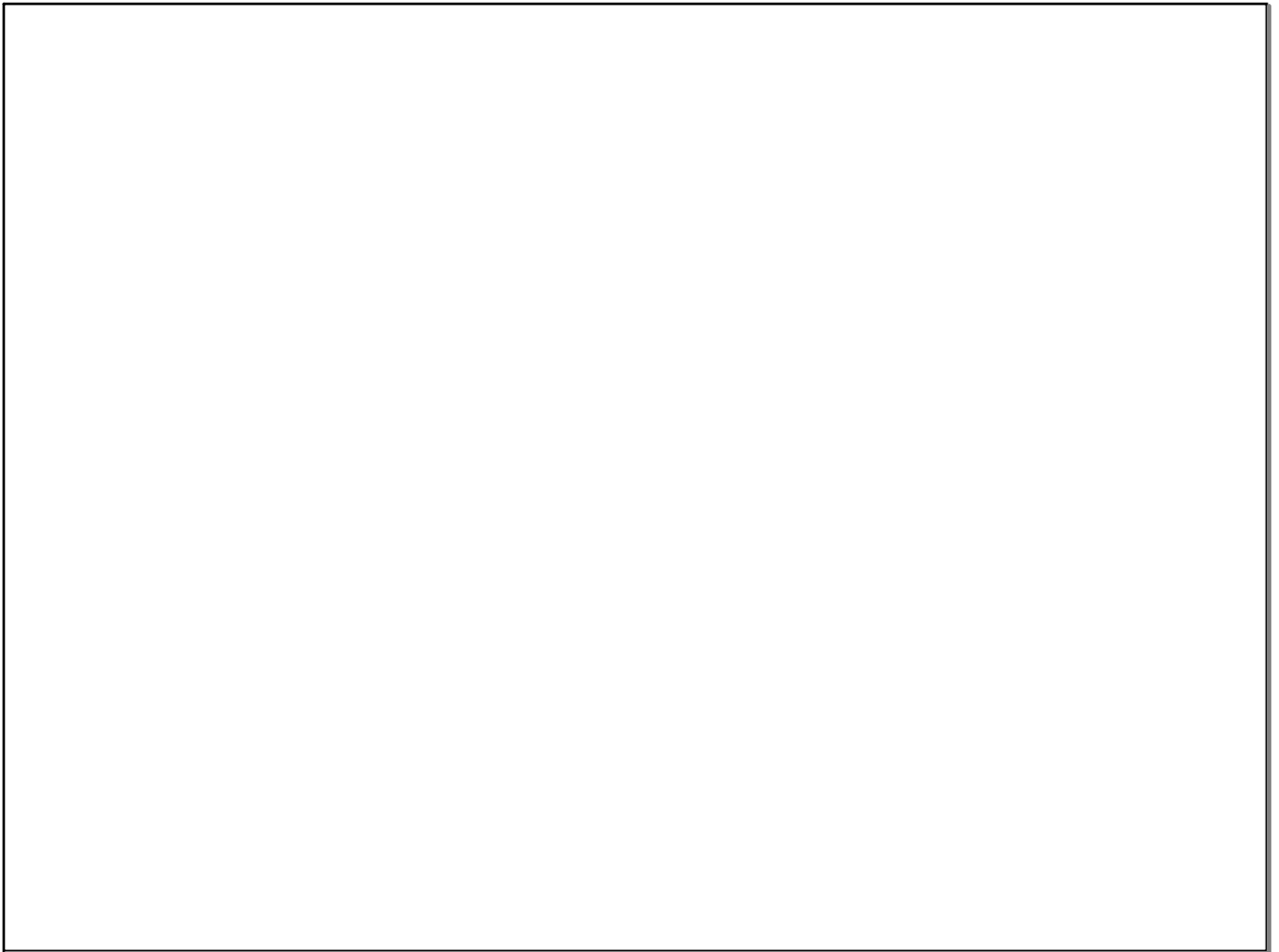


Non-Function

3. Draw a graph to represent a function or non-function.

3. Draw a graph to represent a function or non-function.





<p>a) <math>h(7)</math></p> $h(x) = 2(x-8)$ $h(7) = 2(7-8)$ $h(7) = 2(-1)$ $h(7) = -2$	<p>b) <math>w(15)</math></p> $w(x) = 2x - 5$ $w(15) = 2(15) - 5$ $w(15) = 30 - 5$ $w(15) = 25$	<p>c) <math>a(4) + t(5)</math></p> $a(x) = \frac{5x-10}{2}$ $a(4) = \frac{5(4)-10}{2}$ $= \frac{20-10}{2}$ $= \frac{10}{2} = 5$ <p style="text-align: center;">5 + 96 101</p> $t(x) = 6(x+11)$ $t(5) = 6(5+11)$ $= 6(16)$ $= 96$
<p>d) <math>w(h(2))</math></p> $h(x) = 2(x-8)$ $h(2) = 2(2-8)$ $h(2) = 2(-6)$ $h(2) = -12$	$w(x) = 2x - 5$ $w(-12) = 2(-12) - 5$ $w(-12) = -24 - 5$ $w(-12) = -29$	<p>e) <math>h(3) + a(10) - t(2)</math></p> $-10 + 20 - 78$ $= -68$ $h(x) = 2(x-8)$ $h(3) = 2(3-8)$ $h(3) = 2(-5)$ $h(3) = -10$ $a(x) = \frac{5x-10}{2}$ $a(10) = \frac{5(10)-10}{2}$ $= \frac{50-10}{2}$ $= \frac{40}{2}$ $= 20$ $t(x) = 6(x+11)$ $t(2) = 6(2+11)$ $= 6(13)$ $= 78$

\*\*\*\*THE NEXT TWO QUESTIONS ARE DIFFERENT!!!!\*\*\*\*\*

f)  $w(x) = 63$

$$w(x) = 2x - 5$$

$$63 = 2x - 5$$

$$68 = 2x$$

$$34 = x$$

g)  $t(x) = 216$

$$t(x) = 6(x + 11)$$

$$216 = 6x + 66$$

$$150 = 6x$$

$$25 = x$$