

Graphing Lines

Date _____

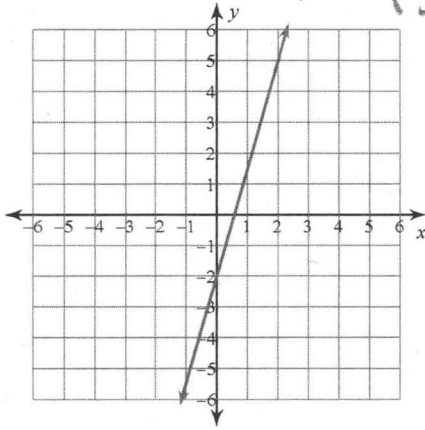
Period _____

Sketch the graph of each line.

1) $y = \frac{7}{2}x - 2$

$$D = \{x \in \mathbb{R}\}$$

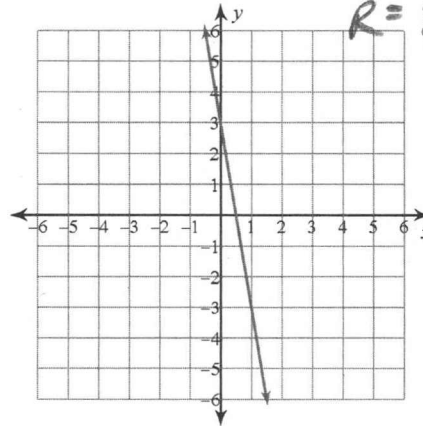
$$R = \{y \in \mathbb{R}\}$$



2) $y = -6x + 3$

$$D = \{x \in \mathbb{R}\}$$

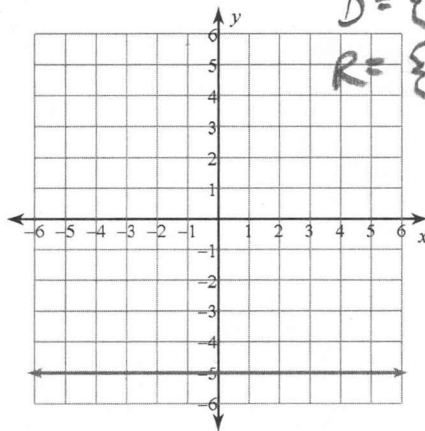
$$R = \{y \in \mathbb{R}\}$$



3) $y = -5$

$$D = \{x \in \mathbb{R}\}$$

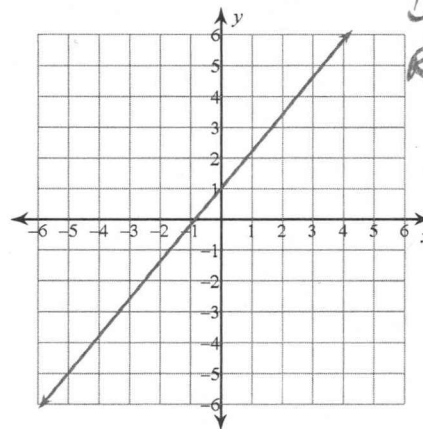
$$R = \{y = -5\}$$



4) $y = \frac{6}{5}x + 1$

$$D = \{x \in \mathbb{R}\}$$

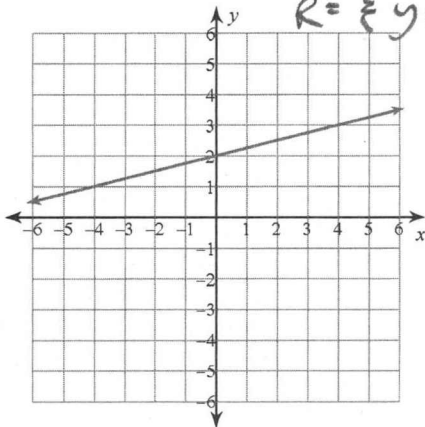
$$R = \{y \in \mathbb{R}\}$$



5) $y = \frac{1}{4}x + 2$

$$D = \{x \in \mathbb{R}\}$$

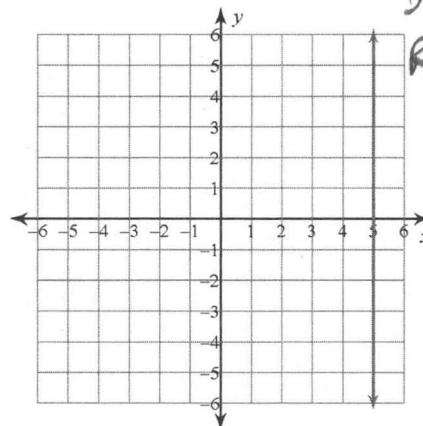
$$R = \{y \in \mathbb{R}\}$$



6) $x = 5$

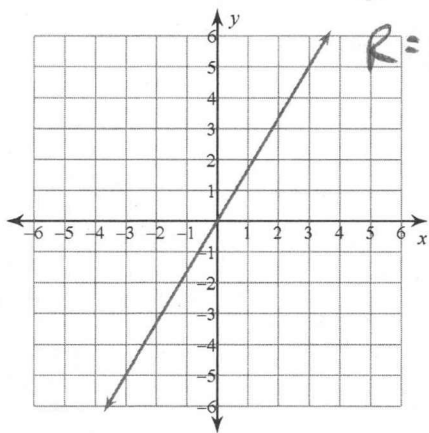
$$D = \{x = 5\}$$

$$R = \{y \in \mathbb{R}\}$$



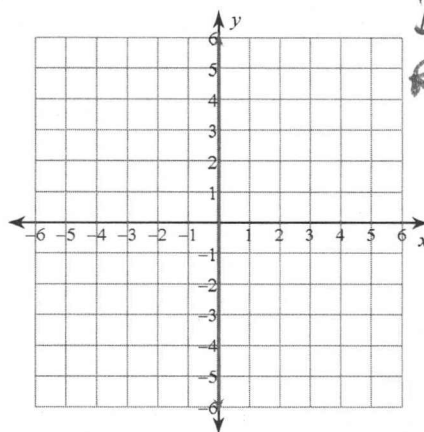
7) $y = \frac{5}{3}x$

$D = \{x \in \mathbb{R}\}$
 $R = \{y \in \mathbb{R}\}$



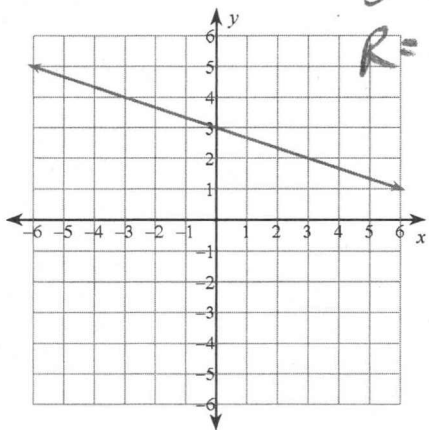
8) $x = 0$

$D = \{x = 0\}$
 $R = \{y \in \mathbb{R}\}$



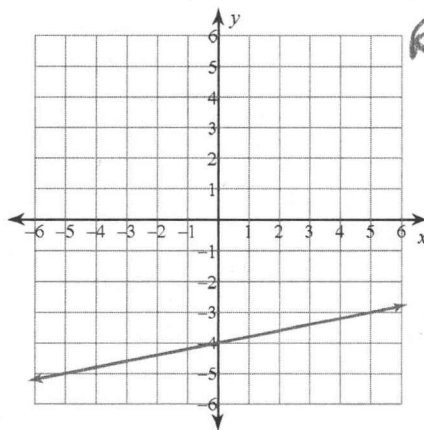
9) $y = -\frac{1}{3}x + 3$

$D = \{x \in \mathbb{R}\}$
 $R = \{y \in \mathbb{R}\}$



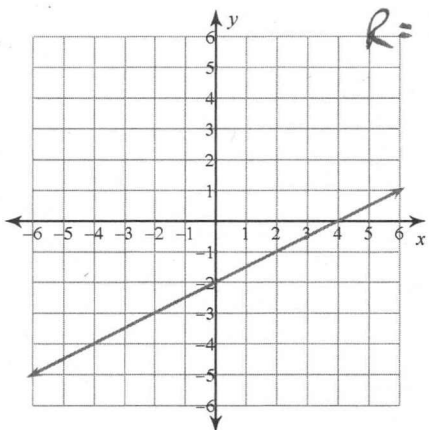
10) $y = \frac{1}{5}x - 4$

$D = \{x \in \mathbb{R}\}$
 $R = \{y \in \mathbb{R}\}$



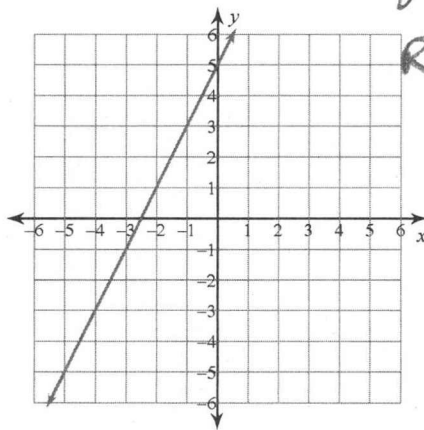
11) $y = \frac{1}{2}x - 2$

$D = \{x \in \mathbb{R}\}$
 $R = \{y \in \mathbb{R}\}$



12) $y = 2x + 5$

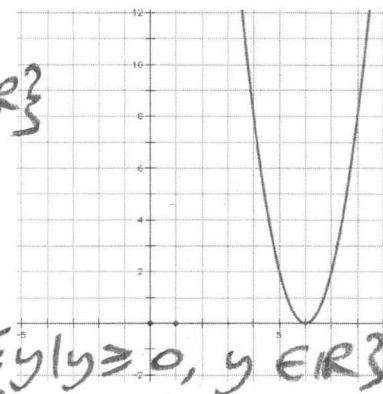
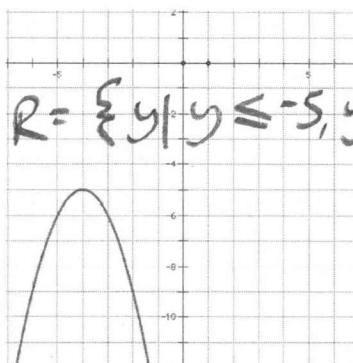
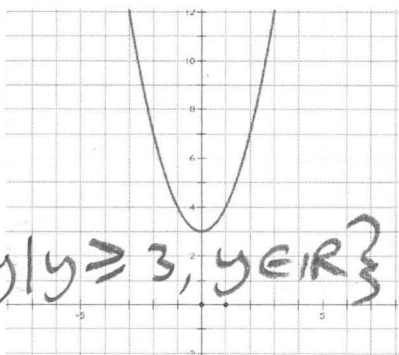
$D = \{x \in \mathbb{R}\}$
 $R = \{y \in \mathbb{R}\}$



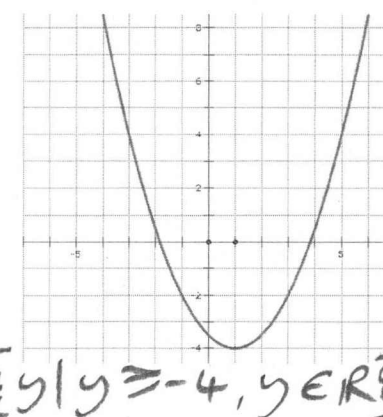
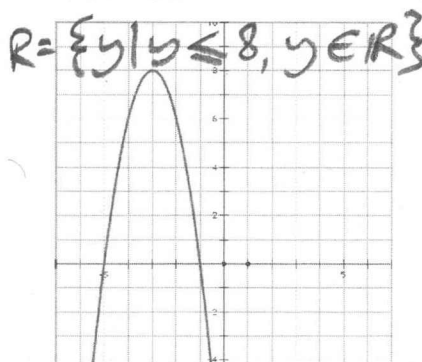
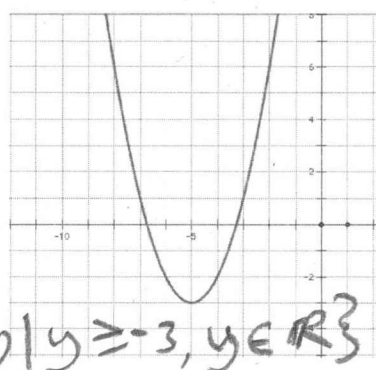
Write an equation of each graph below in the form $f(x) = a(x-h)^2 + k$.

ALL DOMAINS $D = \{x \in \mathbb{R}\}$

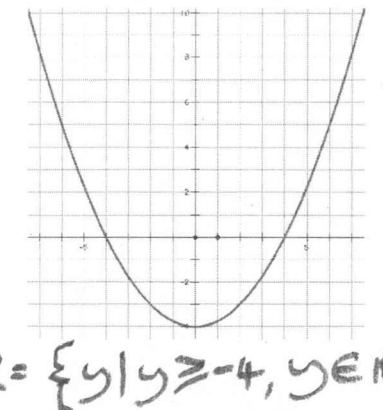
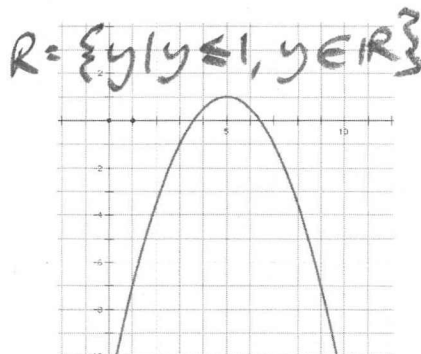
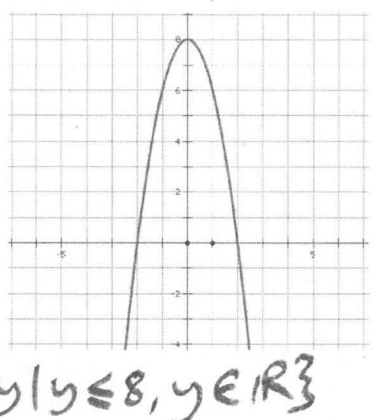
33. $f(x) =$ _____ 34. $f(x) =$ _____ 35. $f(x) =$ _____



36. $f(x) =$ _____ 37. $f(x) =$ _____ 38. $f(x) =$ _____



39. $f(x) =$ _____ 40. $f(x) =$ _____ 41. $f(x) =$ _____



$$f(x) = -x^2$$

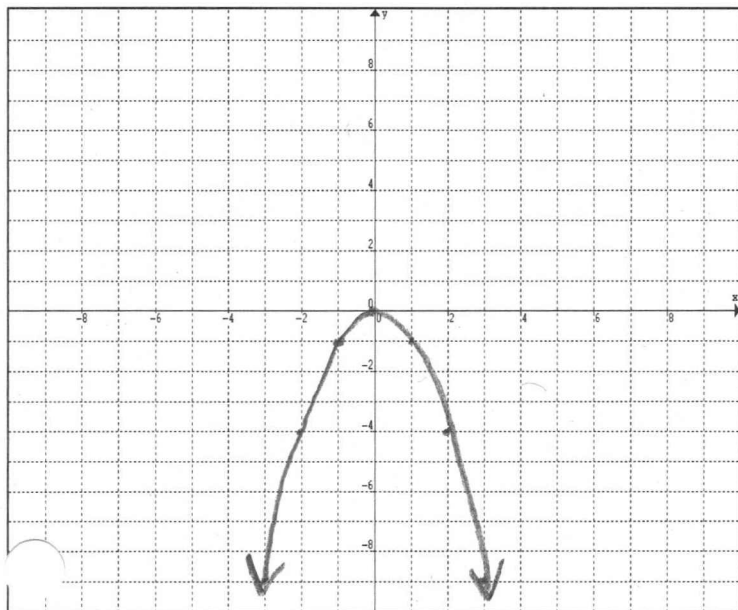
$$D = \{x \in \mathbb{R}\}$$

$$R = \{y \mid y \leq 0, y \in \mathbb{R}\}$$

Vertex =

y-intercept :

x-intercept:



$$6. f(x) = -x^2 + 4$$

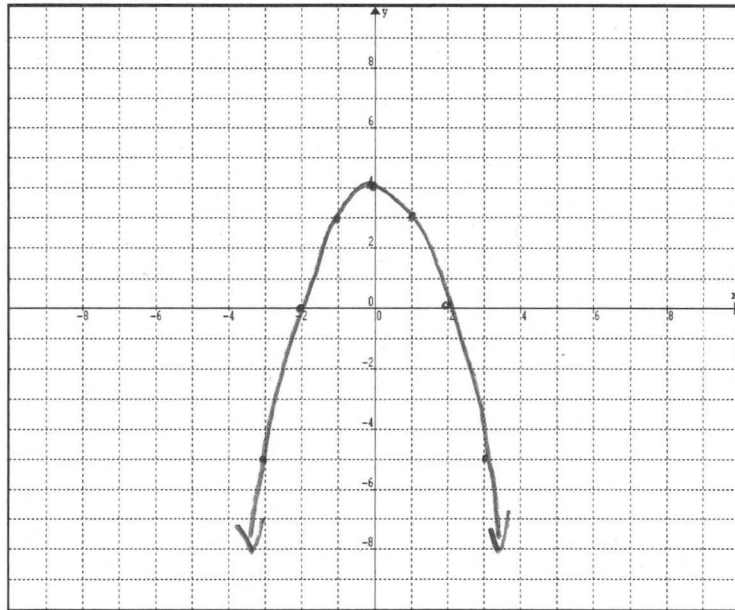
$$D = \{x \in \mathbb{R}\}$$

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

Vertex =

y-intercept :

x-intercept:



$$7. f(x) = -(x+3)^2$$

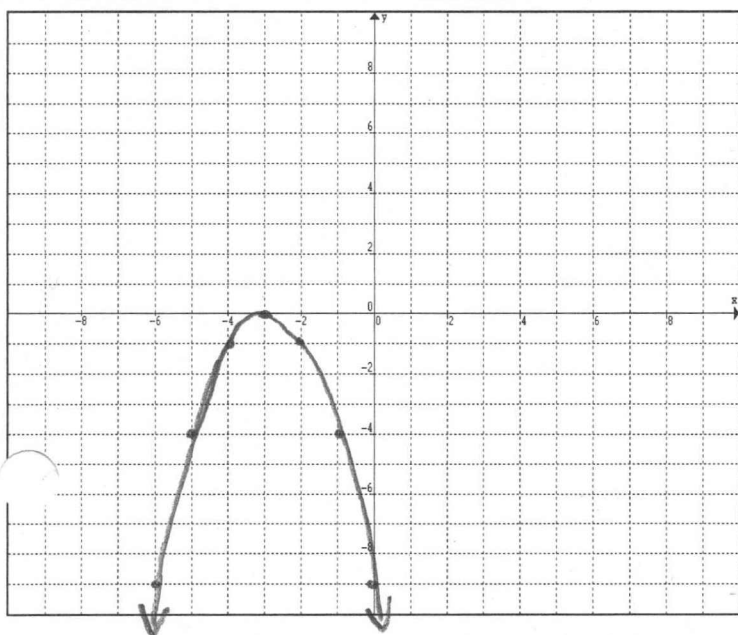
$$D = \{x \in \mathbb{R}\}$$

$$R = \{y \mid y \leq 0, y \in \mathbb{R}\}$$

Vertex =

y-intercept :

x-intercept:



$$8. f(x) = -(x-1)^2 - 3$$

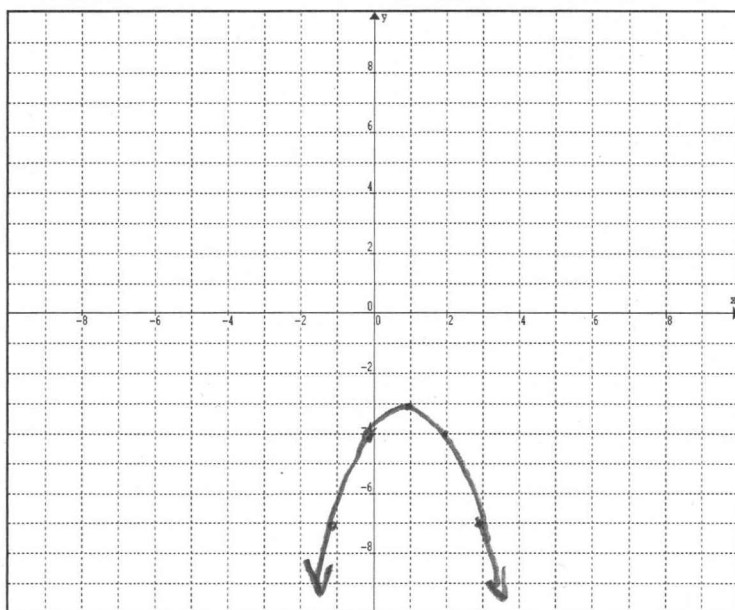
$$D = \{x \in \mathbb{R}\}$$

$$R = \{y \mid y \leq -3, y \in \mathbb{R}\}$$

Vertex =

y-intercept :

x-intercept:



$$f(x) = 2x^2$$

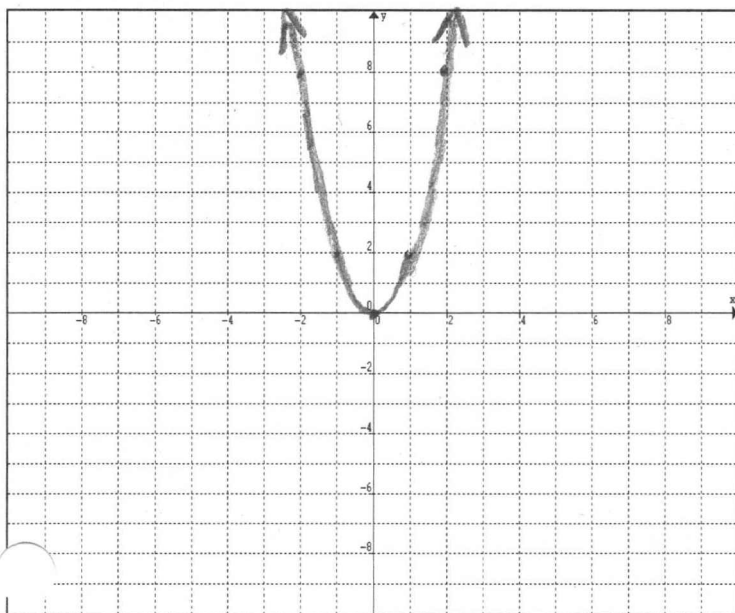
$$D = \{x \in \mathbb{R}\}$$

$$R = \{y \mid y \geq 0, y \in \mathbb{R}\}$$

Vertex =

y-intercept :

x-intercept:



$$10. f(x) = -2x^2$$

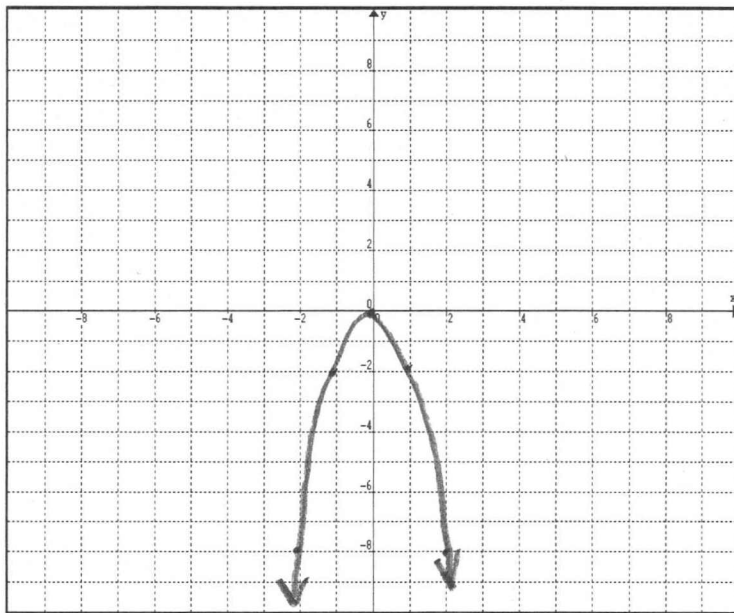
$$D = \{x \in \mathbb{R}\}$$

$$R = \{y \mid y \leq 0, y \in \mathbb{R}\}$$

Vertex =

y-intercept :

x-intercept:



$$11. f(x) = 2(x+3)^2 - 6$$

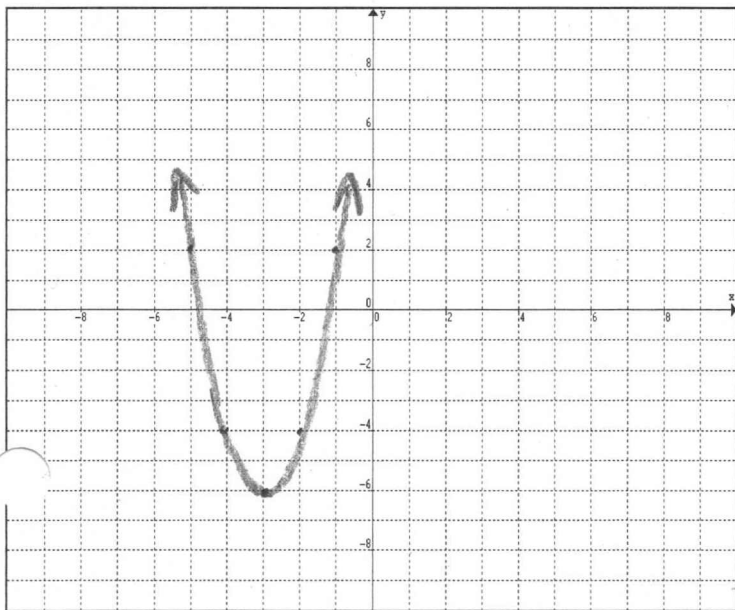
$$D = \{x \in \mathbb{R}\}$$

$$R = \{y \mid y \geq -6, y \in \mathbb{R}\}$$

Vertex =

y-intercept :

x-intercept:



$$12. f(x) = -2(x-1)^2 - 2$$

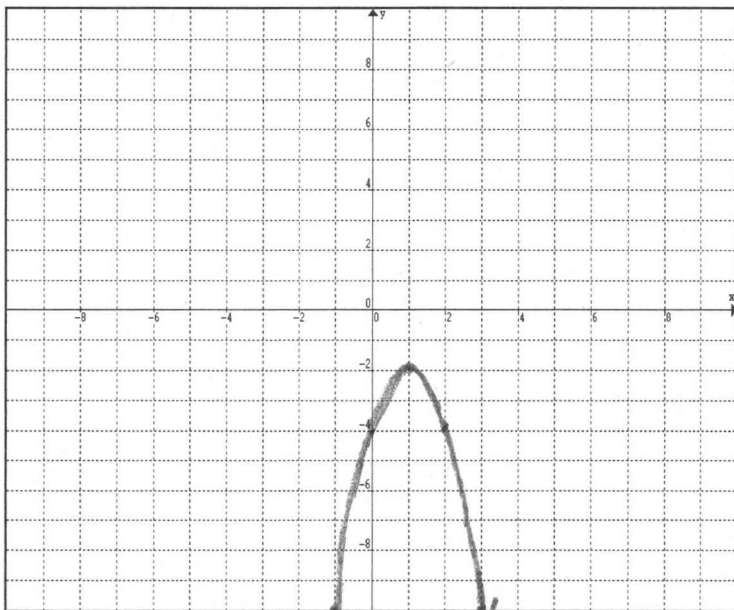
$$D = \{x \in \mathbb{R}\}$$

$$R = \{y \mid y \leq -2, y \in \mathbb{R}\}$$

Vertex =

y-intercept :

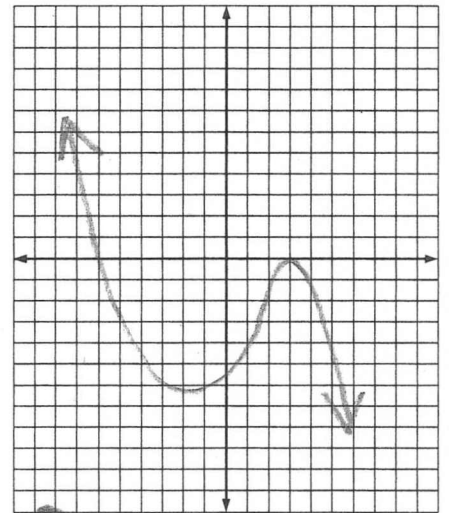
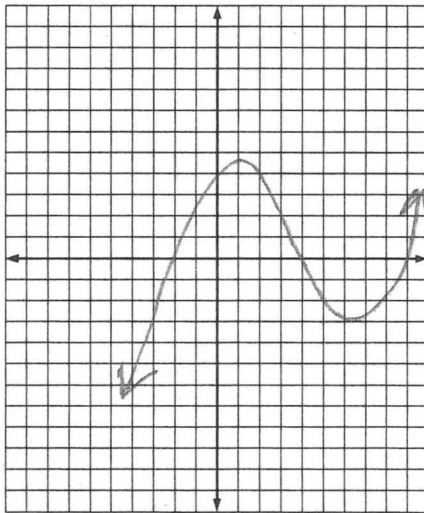
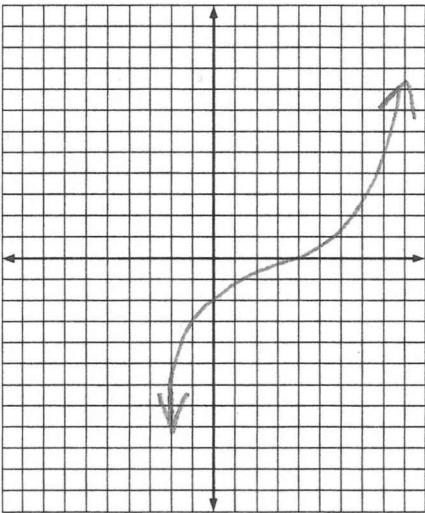
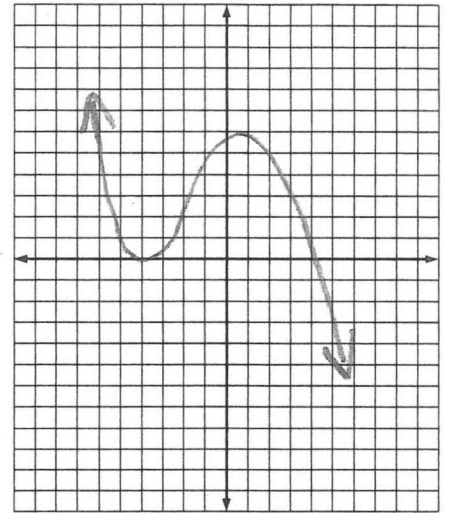
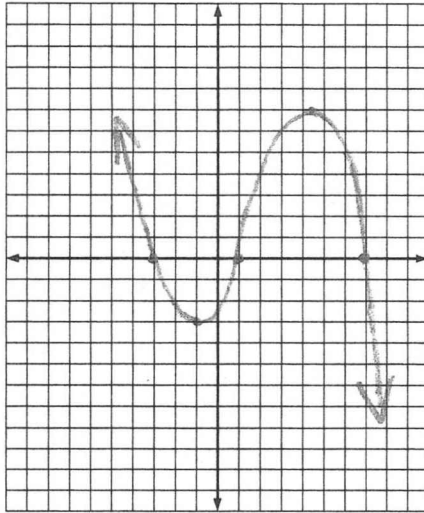
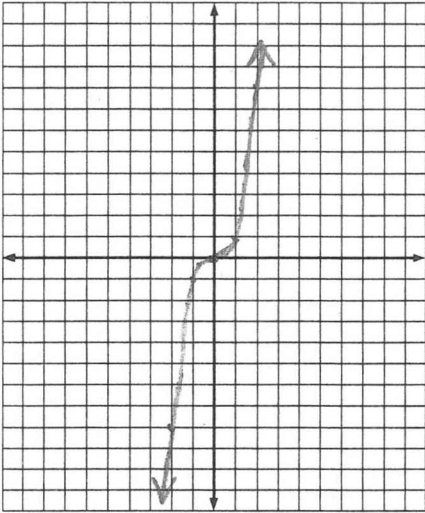
x-intercept:



CUBIC FUNCTIONS

Name: _____

Date: _____



$$D = \{x \in \mathbb{R}\}$$

$$R = \{y \in \mathbb{R}\}$$

