



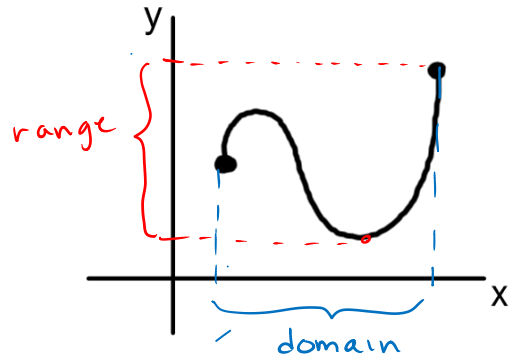
COORDINATE SYSTEM/GRAPHS OF FUNCTIONS

: Graph various functions without a calculator and state their domain and range.

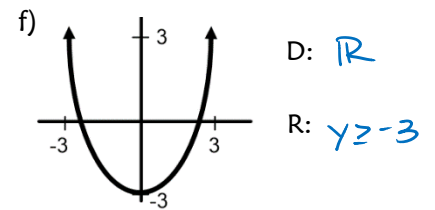
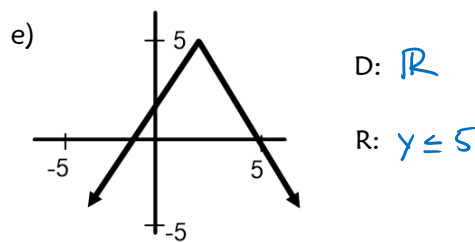
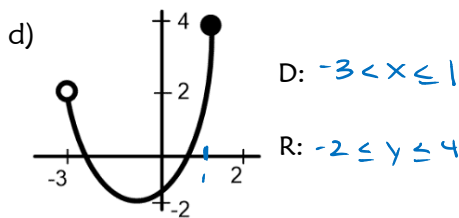
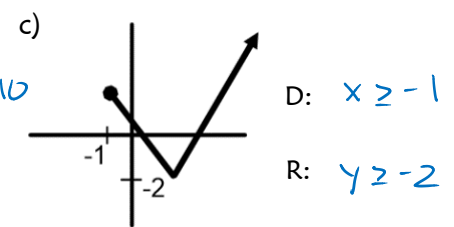
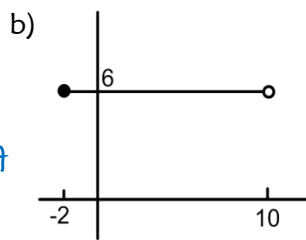
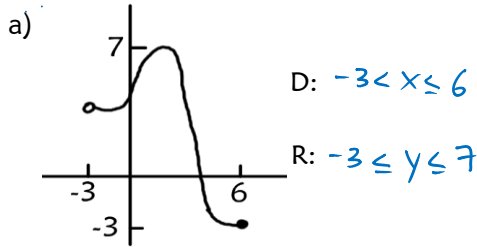
DOMAIN AND RANGE:

Domain is the set of values of the independent variable.

Range is the set of values of the dependent variable corresponding to all variables of the independent variable in the domain.



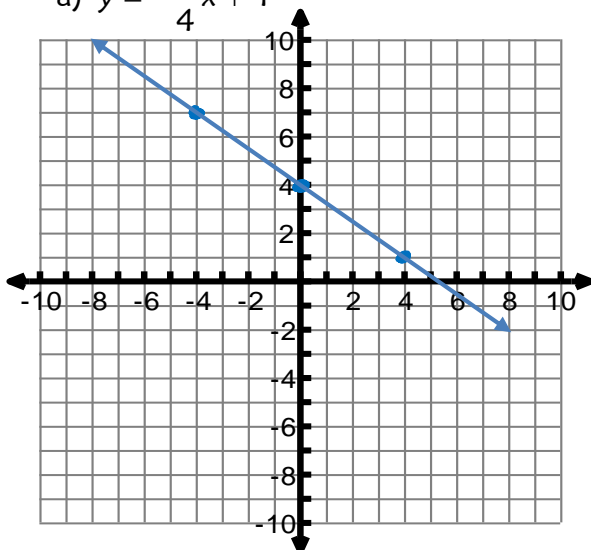
Identify the domain and range of the following:



PLOTTING FUNCTIONS

1) Plot the graphs of the following functions and state their domain and range.

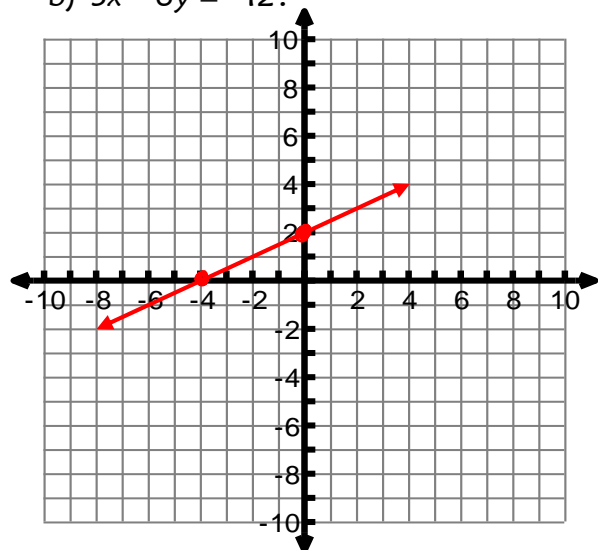
a) $y = -\frac{3}{4}x + 4$



D: \mathbb{R}

R: \mathbb{R}

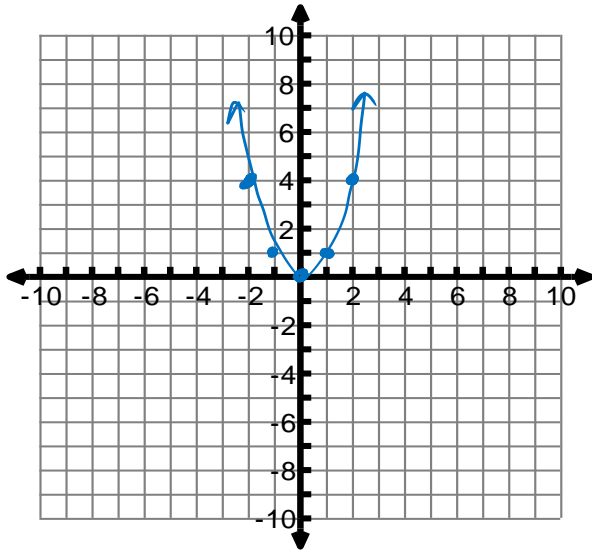
b) $3x - 6y = -12$



D: \mathbb{R}

R: \mathbb{R}

2) Plot the graph of $y = x^2$. State the domain and range.



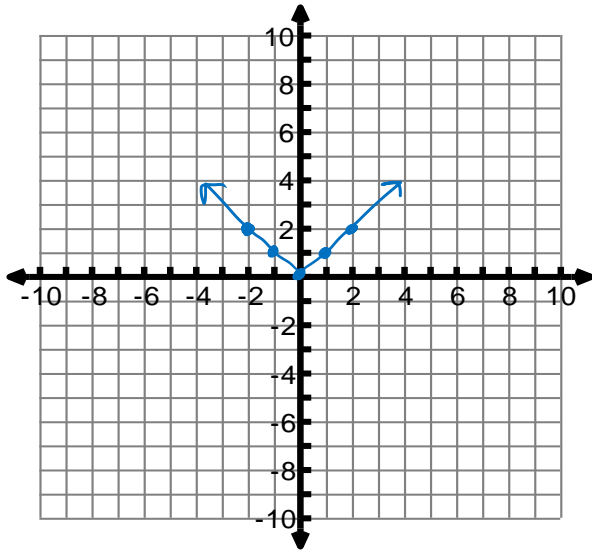
x	y
-2	4
-1	1
0	0
1	1
2	4

D: \mathbb{R}

R: $y \geq 0$

From the table, none of the y-values can ever be negative.

3) Plot the function $y = |x|$. State the domain and range.

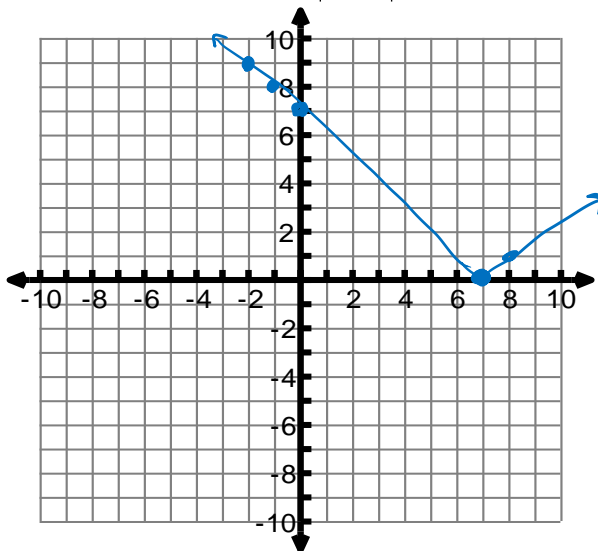


x	y
-2	2
-1	1
0	0
1	1
2	2

D: \mathbb{R}

R: $y \geq 0$

4) Plot the graph of $y = |x - 7|$. State the domain and range.



x	y
-2	$ -2-7 =9$
-1	$ -1-7 =8$
0	$ 0-7 =7$
7	$ 7-7 =0$
8	$ 8-7 =1$

D: \mathbb{R}

R: $y \geq 0$