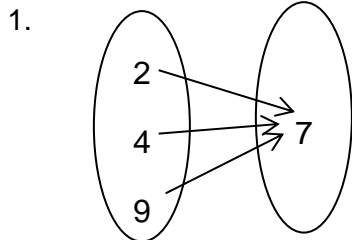


**Self-Check #11 – Functions**

Determine if the following are functions. State the Domain and Range.



function: yes or no

D:

R:

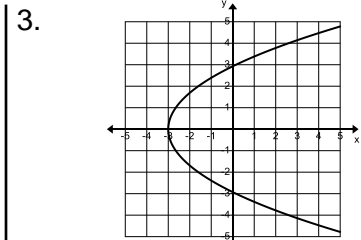
2. 

$x$	$f(x)$
0	0
2	1
4	3
6	9

function: yes or no

D:

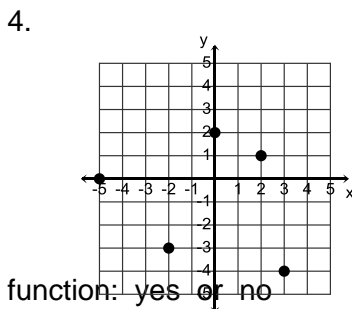
R:



function: yes or no

D:

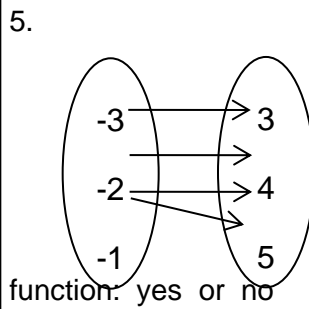
R:



function: yes or no

D:

R:



function: yes or no

D:

R:

6.  $\{(-1, 1), (0, 0), (1, 1), (2, 4)\}$

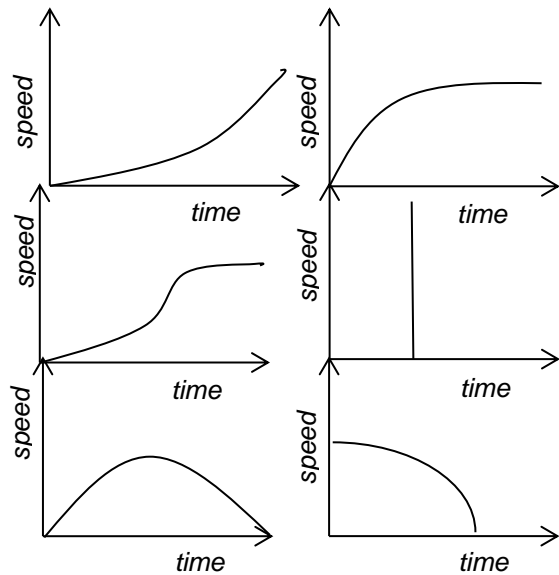
function: yes or no

D:

R:

7. Match the statement to the graph.

- a) Start out slow and slowly increase speed then stay at 35 mph.
- b) From 35 mph to a stop.
- c) From 0 to 50 mph in 0 seconds.
- d) Start out fast and then stay at 35 mph.
- e) Start out slow and keep increasing speed.
- f) Start out and then run out of gas.



8. A tree grows 2 feet every year. Create a table to show how tall the tree will be as it continues to age.

Independent: \_\_\_\_\_

Dependent: \_\_\_\_\_

Discrete or Continuous

9. Generally, the average price of going to the movies has steadily increased over time.

Independent: \_\_\_\_\_

Dependent: \_\_\_\_\_

Discrete or Continuous

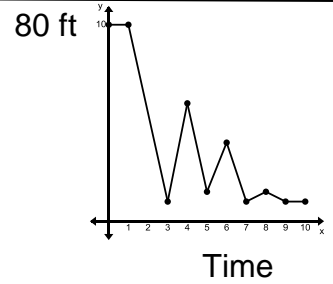
10. The air pressure inside a tire increases as the temperature increases.

Independent: \_\_\_\_\_

Dependent: \_\_\_\_\_

Discrete or Continuous

Bungee Jumping



Independent Variable: \_\_\_\_\_

Dependent Variable: \_\_\_\_\_

y-intercept: \_\_\_\_\_

What's Happening? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

11. For each domain,

a) state the slope and b) determine the equation of the line for the specified interval.

D:  $[0, 4]$  [hint:  $(0, \quad)$  &  $(4, \quad)$ ]

$m =$

$y =$

D:  $[4, 6]$

$m =$

$y =$

D:  $[6, 9]$

$m =$

$y =$

D:  $[9, 12]$

$m =$

$y =$

