

Name: _____

Show work needed to justify your answer.

Date: _____

HW: # 1: Math IBSL - Standard 1 - What is a Function

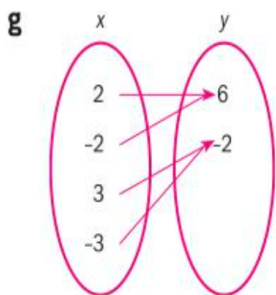
5 points

1 Determine whether each relation below is a function or not. If it is not a function, state the reason why.

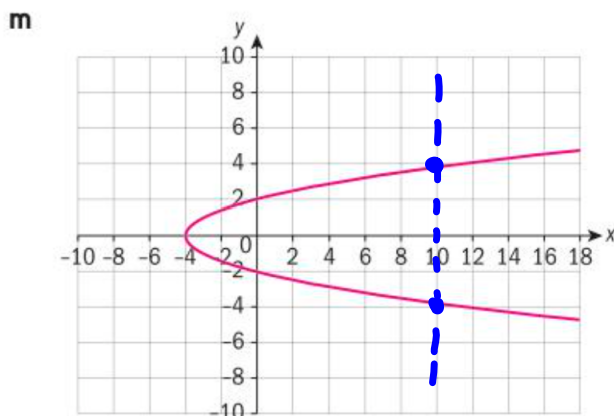
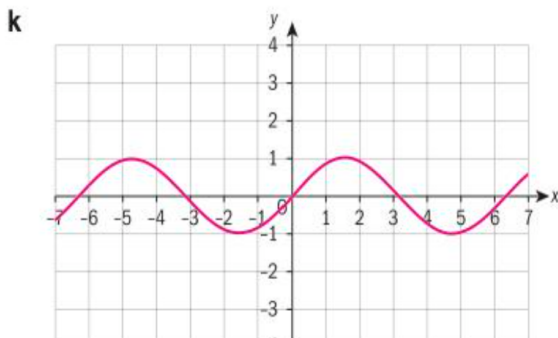
- a The number of identical marbles and the total mass of the marbles.
- b The number of sides in a polygon and the sum of the interior angles.
- c The number of adult movie tickets purchased and the total cost.
- d $\{(0, 1), (1, 2), (2, 3), (3, 4), \dots\}$
- e $\{(1, 0), (0, 1), (2, 0), (0, 2), (3, 0), (0, 3)\}$

f

x	2	3	4	6	7	9
y	1	1	1	1	1	1



h $y = -2x + 6$ i $x = 3$ j $y = x^2$



- Ex: #
- a. Function
- | | |
|---|----|
| 7 | 21 |
| 8 | 24 |
- b. Function
- | | |
|---|----------|
| # | Degrees |
| 3 | 180 |
| 4 | 360 |
| 5 | 540 etc. |
- c. Function
- | | |
|---|----|
| # | \$ |
| 3 | 15 |
| 4 | 20 |
| 5 | 25 |
- d. Function \rightarrow All values of x are different.
- e. Not a function. Values of x Repeat. (0)
- f. function. x Does not Repeat
- g. function. \uparrow
- h. function. All linear eq's are functions except vertical lines. ($x = a$)
- i. Not a function \rightarrow vertical line x Always Repeats.
- j. Function. x does not Repeat
- k. Function \rightarrow Passes vertical line TEST
- m. Not a function. FAILS the vertical line test. x Repeats (10, 4) and (10, -4)