

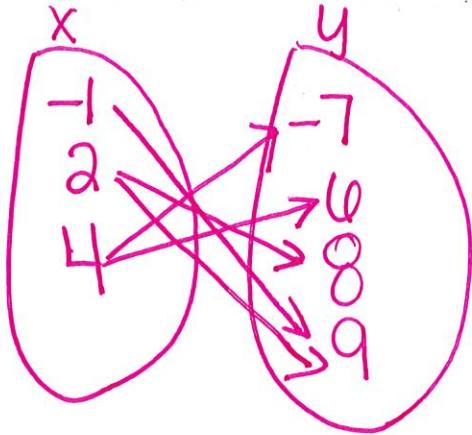
Functions Review

Use the relation $\{(4,6), (2,8), (-1,9), (2,9), (4, -7)\}$ to answer questions 1-4.

- 1) What is the range of this relation?

$$\{-7, 6, 8, 9\}$$

- 2) Draw a mapping diagram for this relation.



- 3) Is this relation a function? Why or why not.

NO, because not every # in domain goes to only 1 # in range

- 4) What is the domain of this relation?

$$\{-1, 2, 4\}$$

Use the function $f(x) = -5x + 7$ to answer questions 5 & 6.

- 5) Find $f(4)$

$$\begin{aligned} f(4) &= -5x + 7 \\ &= -5(4) + 7 \\ f(4) &= -20 + 7 \end{aligned}$$

$$f(4) = -13$$

- 6) Find $f(-8)$

$$\begin{aligned} f(-8) &= -5(-8) + 7 \\ &= 40 + 7 \\ f(-8) &= 47 \end{aligned}$$

Use the relation $\{(6,-3), (-2,9), (2,4), (9,1), (7,-4)\}$ to answer questions 7 - 10.

- 7) Find $f(2) = 4$

- 8) If $f(x) = -4$ what is $x? = 7$

- 9) If $f(x) = -3$, what is $x?$

$$x = 6$$

- 10) If $f(x) = 1$, what is $x?$

$$x = 9$$

11) What ordered pair $f(3) = 2$?

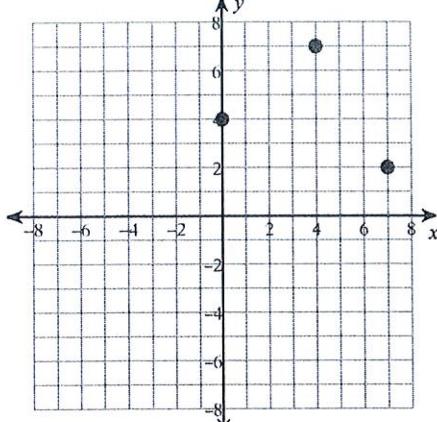
$$(3, 2)$$

12) Which represents $f(-1) = 2$?

$$(-1, 2)$$

Use the graph of $f(x)$, below, to answer questions 13 & 16.

13)



$$\text{Find } f(4) = 7$$

14) If $f(x) = 2$, find x .

$$x = 7$$

15) If $f(x) = 4$, find x .

$$x = 0$$

16) Find $f(7) = 2$