

Answers to Linear Relations Practice #1

Thursday, April 9, 2020 1:31 PM



7a - LINEAR
RELATION...

LINEAR RELATIONS PART I PRACTICE

Eg. 3. The PW Ultimate team is going to Burlington, Washington to play in a tournament. The fee to enter a team is \$50. In addition, it costs \$25 for every player that will be on the team.

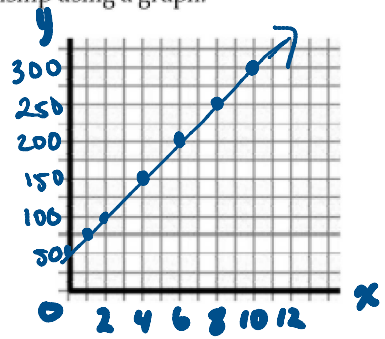
- a. Is this a linear relationship? yes
- b. Can you describe the relationship? For every player to join the team the fee increases by \$25
- c. Express this relationship using a table of values.

x	#players	fee (\$)	y
+1	1	75	+25
+1	2	100	+25
	3	125	
	4	150	

- d. Express this relationship using 3 different ordered pairs.

(1,75) (3,125) (10,300)

- e. Express this relationship using a graph.



- f. Express this relationship using an equation.

- ① you pay \$50 just to register (constant)
- ② for every player add \$25
- ③ let x = number of players
- ④ let y = the total fee in \$

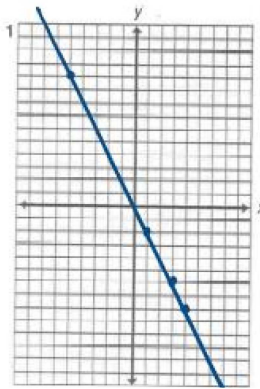
$y = 25x + 50$

Complete the table of values for each equation and then use the table of values to graph each equation. USE A STRAIGHT EDGE!

1

$y = -2x$	
x	y
1	-2
4	-8
-5	10
3	-6

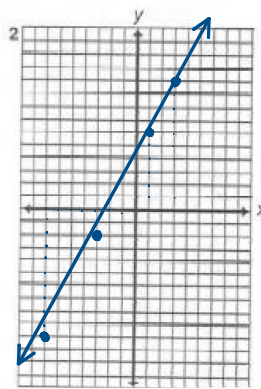
$y = -2(1) = -2$
 $y = -2(4) = -8$
 $y = -2(-5) = 10$
 $y = -2(3) = -6$



2

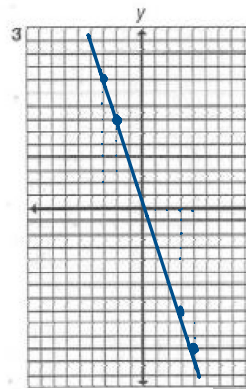
$y = 4 + 2x$	
x	y
3	10
-7	-10
1	6
-3	-2

$y = 4 + 2(3) = 10$
 $y = 4 + 2(-7) = -10$
 \dots



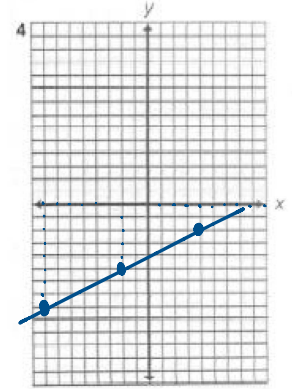
3

$y = -3x + 1$	
x	y
3	-8
-3	10
4	-11
-2	7



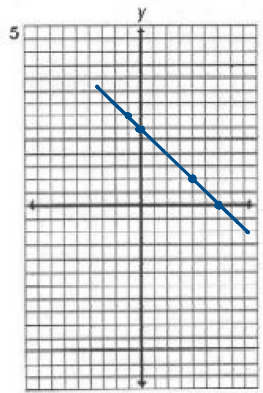
4

$y = \frac{1}{2}x - 4$	
x	y
10	1
-2	-5
4	-2
-8	-8



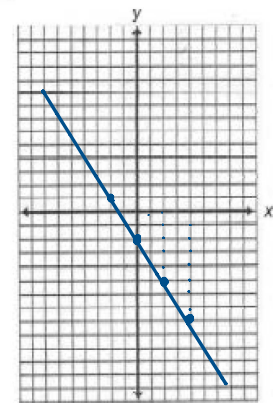
5

$y = -x + 6$	
x	y
4	2
-1	7
6	0
0	6



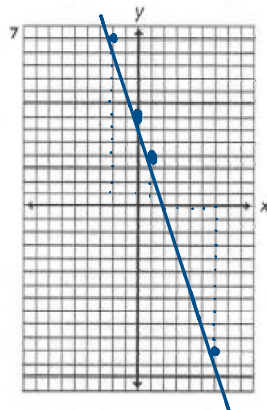
6

$y = -\frac{3}{2}x - 2$	
x	y
4	-8
2	-5
0	-2
-2	1



7

$y = 7 - 3x$	
x	y
6	-11
1	4
0	7
-2	13



8

$y = 1 - x$	
x	y
-2	3
-9	10
9	-8
6	-5

$y = 1 - (-2) = 1 + 2 = 3$
 \dots

