

WARM UP

Write an equation for each function. Tell what each variable you use represents.

1. The length of a box is 4 in. more than three times the height.

2. The number of cards is 3 less than the number of stamps.

MATH COURSE I

Graph Functions

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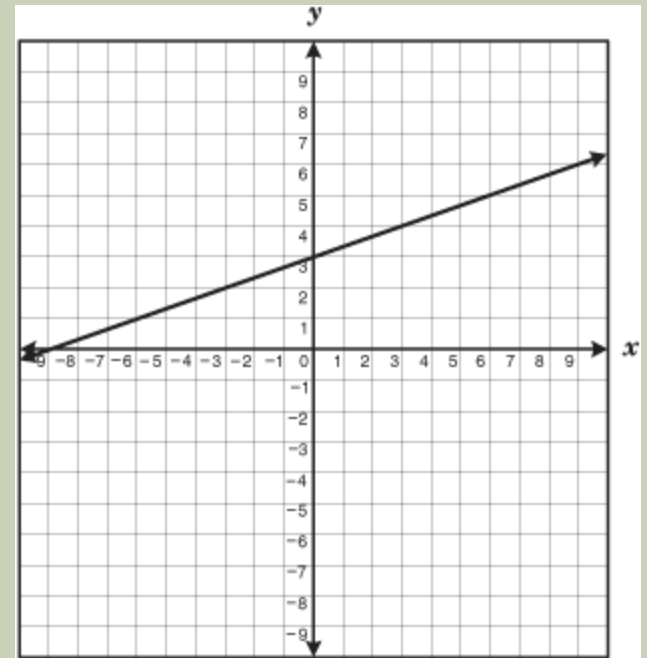
VOCABULARY

Ordered Pair: numbers used to locate a point on a coordinate grid (x,y)

Linear Function: an equation when graphed, forms a straight line

x axis: horizontal (left to right)

y axis: vertical (up and down)



SOLUTIONS

Use the given x-values to write the solutions of the equation as ordered pairs.

$$y = 4x + 2; \quad x = 1, 2, 3, 4$$

Ordered Pairs:

(1,)

(2,)

(3,)

(4,)

x	$4x + 2$	y
1	$4(1) + 2$	
2		
3		
4		

PRACTICE

$$y = 5x + 3; \quad x = 2, 3, 4$$

PRACTICE

$$y = 6x - 2; \quad x = 3, 4, 5$$

IS IT A SOLUTION?

Determine if the ordered pair is a solution.

Example: $y = 5x$; $(4, 20)$

Step 1: Substitution $20 = 5(4)$

Step 2: Solve $20 = 20$ (yes)

PRACTICE

Determine if the ordered pair is a solution.

1) $y = x + 1$; $(2, 3)$

2) $y = 2x - 7$; $(6, 4)$

3) $y = 3x - 12$; $(5, 1)$

Use the graph of the linear function to find the value of y for the given value of x .

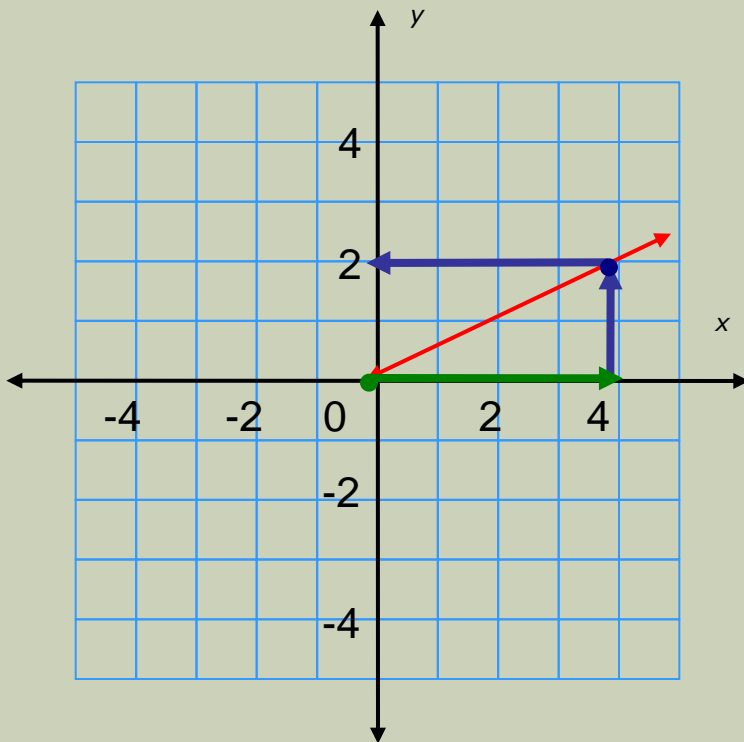
$x = 4$

Start at the origin and move 4 units right.

Move up until you reach the graph. Move left to find the y -value on the y -axis.

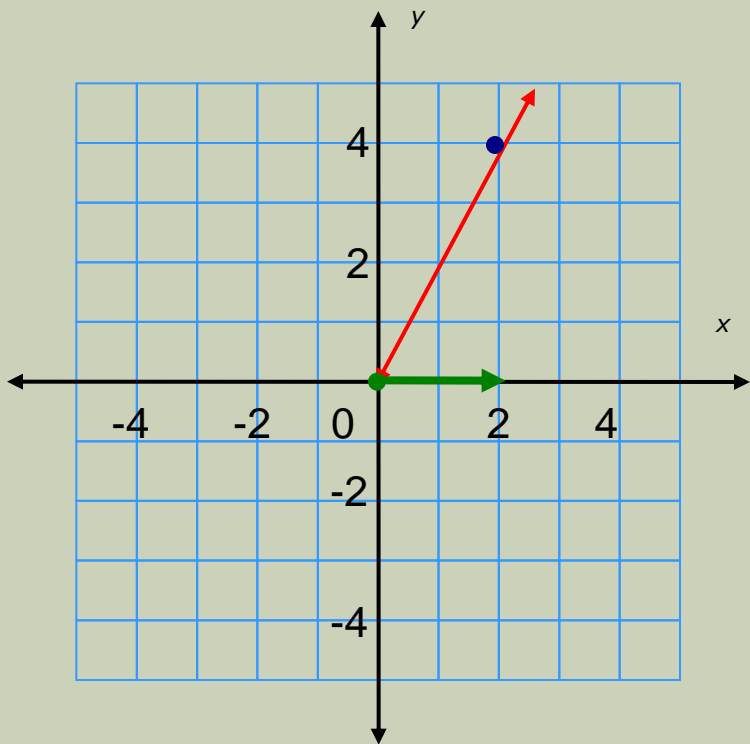
When $x = 4$, $y = 2$.

The ordered pair is $(4, 2)$.



Use the graph of the linear function to find the value of y for the given value of x .

$x = 2$



GRAPH FUNCTIONS

Example: $y = 3x + 2$

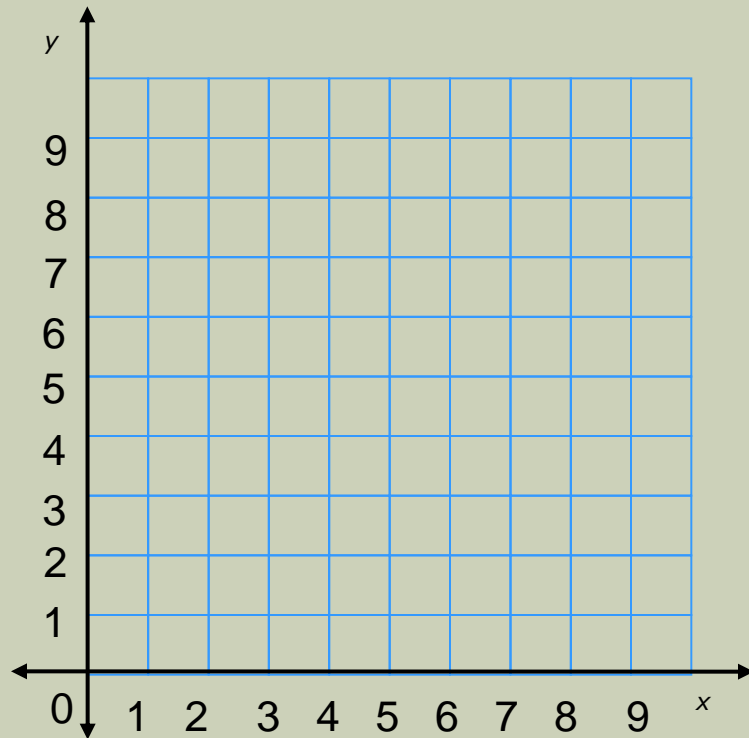
Step 1: Create a table.

Step 2: Write ordered pairs.

Step 3: Graph ordered pairs.

Step 4: Draw the line.

x	y
1	
2	
3	
4	



PRACTICE

- 1) $y = 2x + 5$
- 2) $y = 3x + 3$
- 3) $y = 8 - x$
- 4) $y = x + 4$
- 5) $y = 2x - 1$

x	y
1	
2	
3	
4	

