Name __Key__ Period _____ Date_____

UNIT 5 REVIEW

1) The Mr. Herrera's family and the Mr. Sinclair's family both meet up to go to Disney Land. The Herrera family pays $882.00 for passes for 10 adults and 18 children. The Sinclair family pays $951.00 for passes for 11 adults and 19 children. Write two equations that can be used to solve for the price of the adult and child admissions:

A = adults *price*
C = children *price*
Equation for ~~Smith~~ Herrera Family →
Equation for ~~Jones~~ Sinclair Family →

① Total (Herrera) ⟶ 882
Total (Sinclair) ⟶ 951

② EACH adult price → A
EACH child price → C

③ Herrera's family ⟶ 882 = 10A + 18C
Sinclair's family ⟶ ?

2)

Which of the following points lies on the given line?

(9, 0)
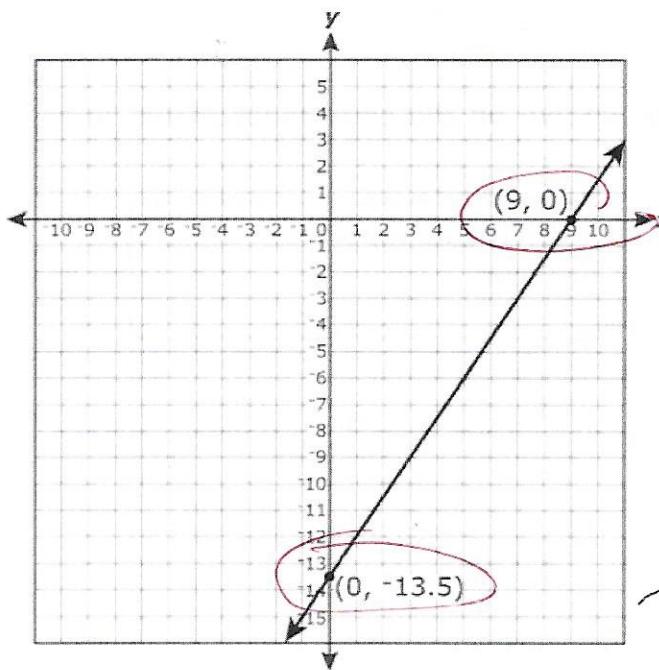
(0, -13.5)

~~(10, 2)~~
B. (-1, -16)
C. (17, 12)
D. $\left(-8, -25\frac{1}{4}\right)$

which one of these gives me this slope??

* Find slope
$(9,0)$ AND $(0,-13.5)$
x_1, y_1 and x_2, y_2

$slope = \dfrac{y_2 - y_1}{x_2 - x_1} = \dfrac{(-13.5)-(0)}{(0)-(9)} = \dfrac{-13.5}{-9} = 1.5$

$(9,0)$ AND $(10,2)$

$slope = \dfrac{y_2-y_1}{x_2-x_1} = \dfrac{(2)-(0)}{(10)-(9)} = \dfrac{2}{-9} = -\dfrac{2}{9}$ ✗ NOT THE ANSWER

3)

If the points (2, m) and (n, 3) are solutions of the equation $2.5x - 3y = 24$ what are the approximate values of m and n?

$(2, m)$ and $(n, 3)$ → if $m = -2.4$ and $n = -2.5$ what is the slope?

A. -2.4 and -2.5
B. -1.7 and -3.6
C. 6.3 and 6
D. 7.2 and 5.5

$\dfrac{y_2-y_1}{x_2-x_1} = \dfrac{(3)-(-2.4)}{(-2.5)-(2)} = ?$

$2.5x - 3y = 24$
$-2.5x \qquad -2.5x$

① * Solve for y
② Find slope

$-3y = 24 - 2.5x$
$\overline{} \qquad \overline{-3}$

$y = \dfrac{24}{-3} + \dfrac{-2.5}{-3}x$

what's my slope

$y = -8 + 0.83x$

4)

* find y-intercept first
* find slope rise/run

run

rise

$slope = \frac{rise}{run} = 3 = \frac{3}{1}$

← y-intercept

$y = mx + b$

$m \rightarrow slope$
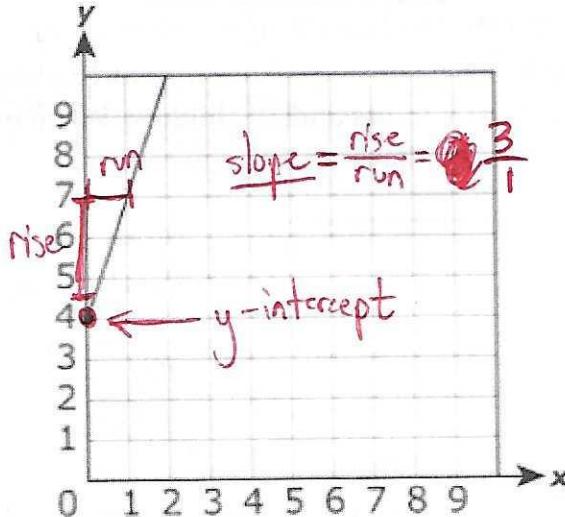
$b \rightarrow y\text{-intercept}$

Write an equation that represents the graph: $y = 3x + 4$

5) What is the *y-intercept* of the function shown on the coordinate plane below?
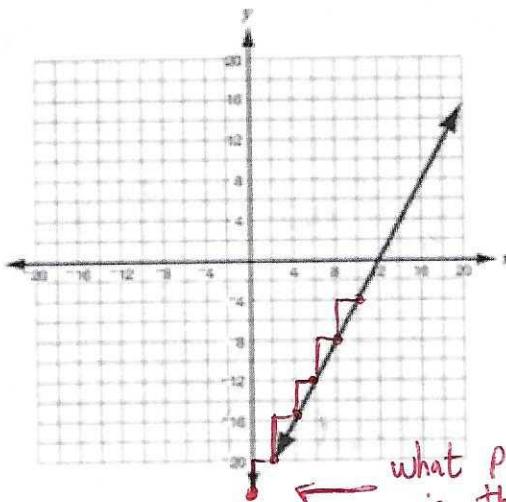
**HINT: Find the slope of the line first!

$\frac{rise}{run} = slope = \frac{2}{1}$

← what point is this???

6) Dwayne and Dani spend a total of $44 at the Allapattah town fair. There is an entrance fee of x dollars per person, and each ride costs $3.50. If they went on the same number of rides, which equation correctly represents this relationship, where n is the number of rides?

Two people ↓ 2 times $3.50 ↓ $7.00

2 people!

$44 = 2x + 7n$

A. $x + 7n = 44$
B. $x + 3.50n = 44$
C. $2x + 7n = 44$
D. $2x + 3.50n = 44$