

Slope Intercept Form HW Day 1

Name _____

1. Find the slope through points $(-5, 14)$ and $(-1, 2)$

2. Find the slope through points $(-5, 6)$ and $(8, 6)$

$$h = 3a + 28.6$$

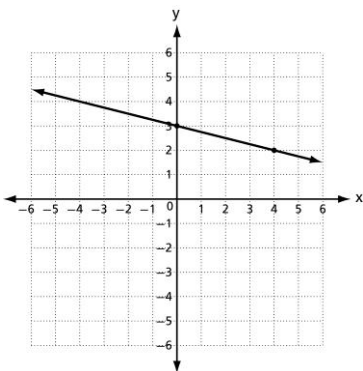
3. A pediatrician uses the model above to estimate the height h of a boy, in inches, in terms of the boy's age a , in years, between the ages of 2 and 5. Based on the model, what is the estimated increase, in inches, of a boy's height each year?

- A) 3
- B) 5.7
- C) 9.5
- D) 14.3

4. Which equation describes the line with a slope of 5 and y -intercept of -3 ?

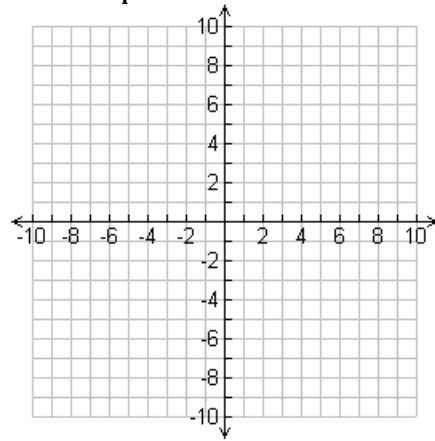
- A $y = -3x + 5$ C $y = 5x - 3$
- B $y = 3x - 5$ D $y = 5x + 3$

5. What is the equation in slope intercept form for the graph?

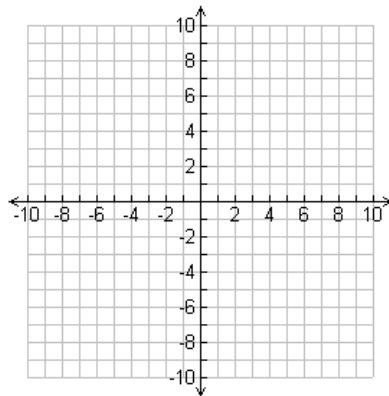


Equation: _____

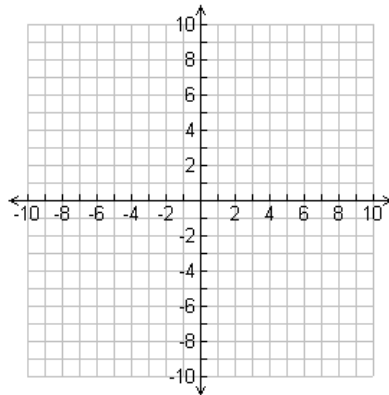
6. Graph: $y = \frac{1}{4}x - 6$



7. Graph: $y = -2x + 3$



8. Graph: $y = -\frac{2}{3}x + 5$



9. A local club charges an initial membership fee as well as a monthly cost. The cost is a linear function of the number of months of membership.

Write a linear function in slope intercept form to describe this situation.

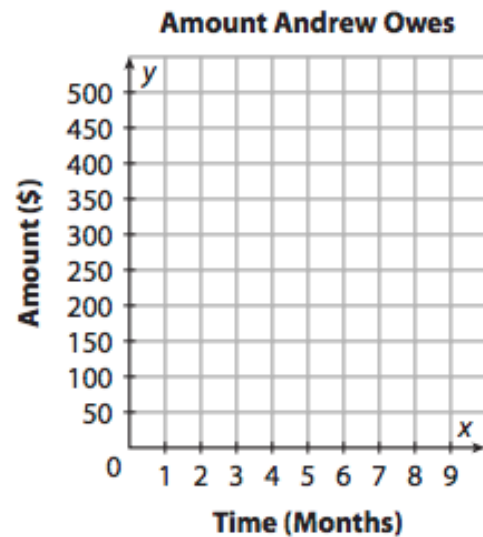
| Membership Cost | |
|-----------------|-----------|
| Time (months) | Cost (\$) |
| 0 | 100 |
| 3 | 277 |
| 6 | 454 |

10. Andrew wants to buy a smart phone that costs \$500. His parents will pay for the phone then Andrew will pay them \$50 each month until the entire amount is repaid.

a. Write a linear function in slope intercept form to describe this situation.

b. What does the slope represent? What does the y intercept represent?

c. Graph this function on the graph to the right.



CHALLENGE: Write an equation of a line in slope intercept form that passes through the points (3, 4) and (7, 8)