Algebra 1A **Exam Review Part 2**

1. Find the **slope** given the two points.

A. $(5, 3)$ and $(10, 8)$

B. $(-3, -10)$ and $(-1, -1)$

C. $(-3, 5)$ and $(7, 5)$

D. $(11, -4)$ and $(11, 8)$

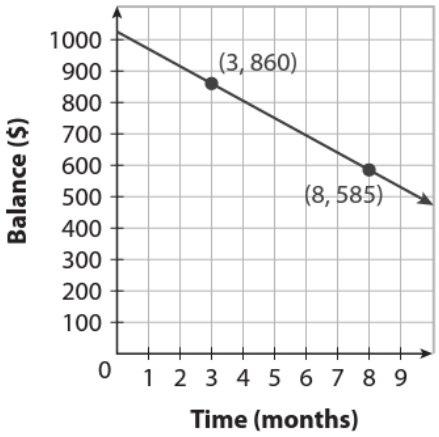
2. Find the **slope** and explain its meaning.

Slope:_____

Meaning:_____

_____

_____



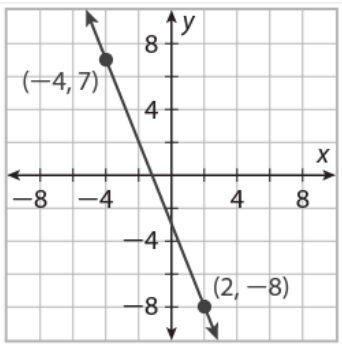
3. Find the **x- and y-intercepts**.

A. $4x - 6y = 24$

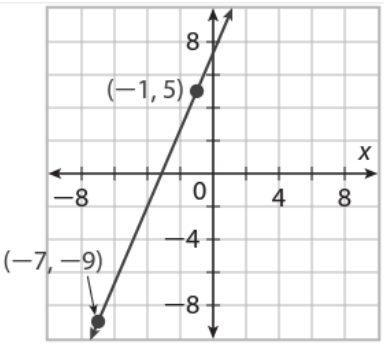
B. $-3x + 9y = 18$

4. Find the **slope** of each line.

A.



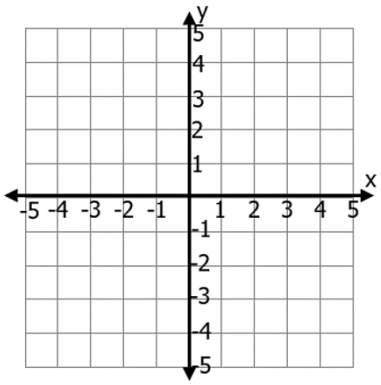
B.



5. Identify the **slope** and **y-intercept**. Then, use the slope and y-intercept to **graph** the line.

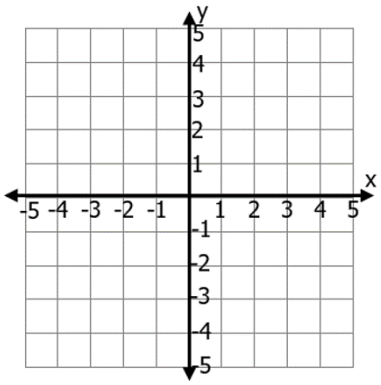
A. $y = -\frac{2}{3}x + 5$

Slope: Y-Int:



B. $y = \frac{1}{3}x$

Slope: Y-Int:



Write the equation of the line in <u>slope-intercept</u> form.

6. Slope: $-\frac{2}{5}$ Y-int: $(0, 11)$

7. Slope: -3 Point: $(-1, 4)$

8. Points: $(-5, 3)$ and $(-2, -6)$

Write the equation of the line in <u>point-slope</u> form.

9. Slope: -7 Point: $(-3, 5)$

10. Points: $(2, 2)$ and $(0, -3)$

Write the equation of the line in <u>standard form</u>.

11. Slope: 2 Point: $(-3, 5)$

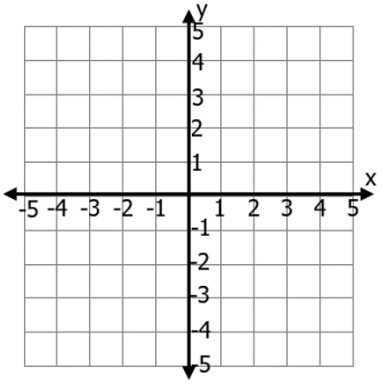
12. Points: $(-6, -1)$ and $(-2, 15)$

Graph the equations in standard form by finding the x- and y-intercepts.

13. $-3x + 5y = 15$

X-int:_____

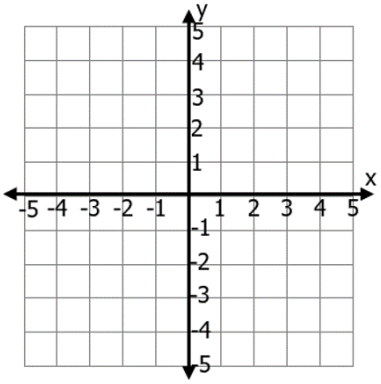
Y-int:_____



14. $2x - 4y = 8$

X-int:_____

Y-int:_____



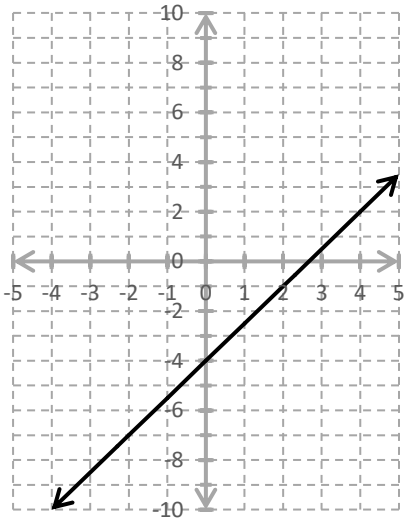
Tell which form each equation is in.

15. $y - 5 = -3(x + 2)$

16. $y = -\frac{6}{5}x + 7$

17. $-8x + 7y = 56$

18. Find the value of $f(x) = \frac{3}{2}x - 4$ when $x = 2$ using the given graph.

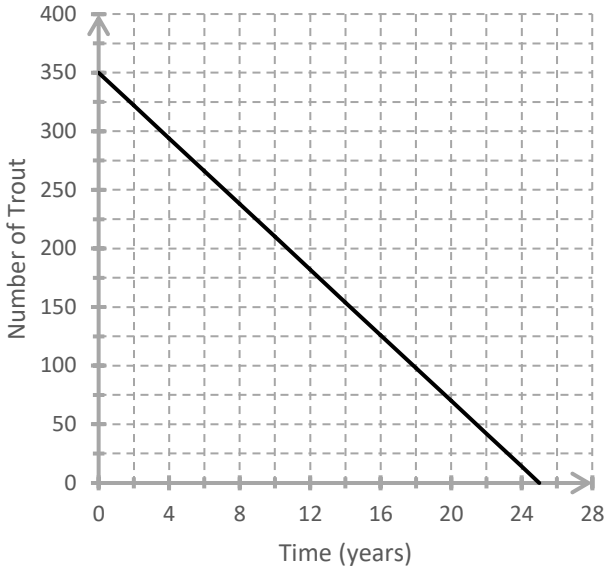


19. Jill earns $8 per hour babysitting for the Reynolds family. She makes $7 an hour plus $5 for travel from the Jones family. Write an equation to find the number of hours when Jill will earn the same amount for both families.

20. A lake was stocked with 350 trout. Each year, the population decreases by 14. The population of trout in the lake after x years is represented by the function $f(x) = 350 - 14x$. What does each intercept represent?

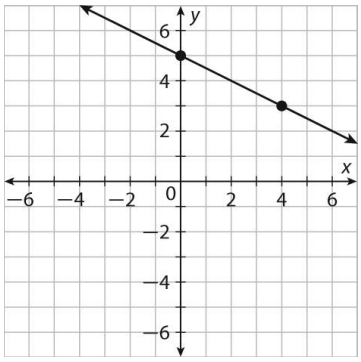
X-int:

Y-Int:

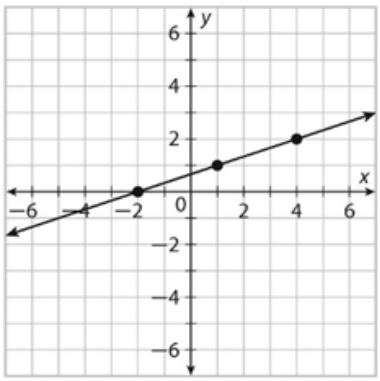


21. Write the equation of the line in **slope-intercept** form.

a.



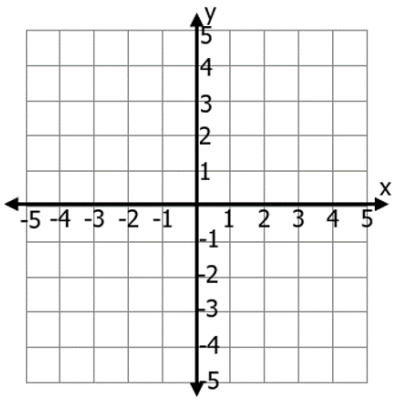
b.



22. The cost of producing x chairs is $p = 46x + 100$. The chairs cost \$50 a piece, which can be represented by $c = 50x$. For how many chairs does the cost of production equal the sales?

23. Graph **the point-slope form** equations below:

a. $y - 5 = -\frac{4}{3}(x + 2)$



b. $y + 1 = 2(x - 4)$