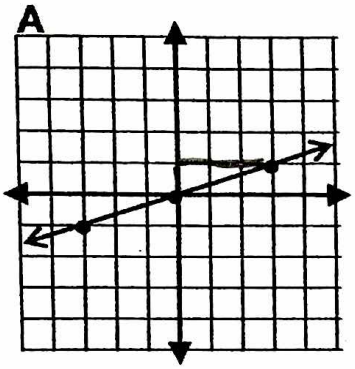
NAME Key DATE _____ PERIOD ___

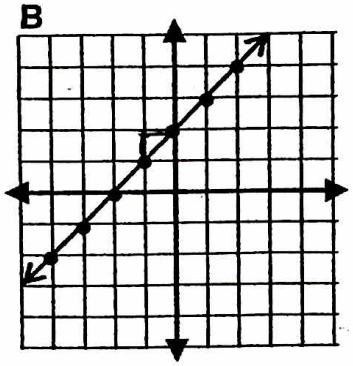
INTERPRETING GRAPHS

Refer to graphs A, B, and C for problems 1-15.

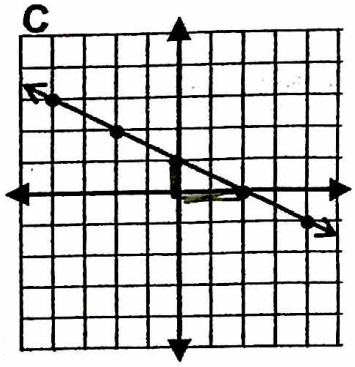
A



B



C



1. In A, what is the value of y when x = 3? 1
2. In B, what is the value of y when x = -2? 0
3. In C, what is the value of x when y = 2? -2
4. In A, what is the value of x when y = -1? -3
5. In B, what is the value of x when y = 3? 1
6. In C, what is the value of y when x = 2? 0
7. In B, what is the value of y when x = 3? 5
8. In C, what is the value of x when y = 3? -4
9. In A, what is the value of y when x = 0? 0
10. What is the slope of the line in graph A? $m = \frac{1}{3}$
11. What is the slope of the line in graph B? $m = 1$
12. What is the slope of the line in graph C? $m = \frac{-1}{2}$
13. What is the equation of the line in graph A? $y = \frac{1}{3}x + 0$
14. What is the equation of the line in graph B? $y = 1x + 2$
15. What is the equation of the line in graph C? $y = -\frac{1}{2}x + 1$

16. If (3, y) is a solution to the equation y = 2x + 4, what is the value of y?

$y = 2(3) + 4$

$y = 6 + 4$

$y = 10$

17. If (-2, y) is a solution to the equation 2x – 3y = 5, what is the value of y?

$2(-2) - 3y = 5$

$-4 - 3y = 5$

$+4 \quad +4$

$-3y = 9$

$\frac{-3y}{-3} = \frac{9}{-3}$

$y = -3$

18. If (x, 7) is a solution to the equation 5x – y = 3, what is the value of x?

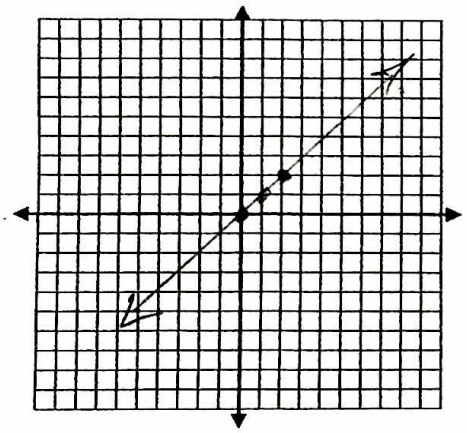
$5x - 7 = 3$

$+7 \quad +7$

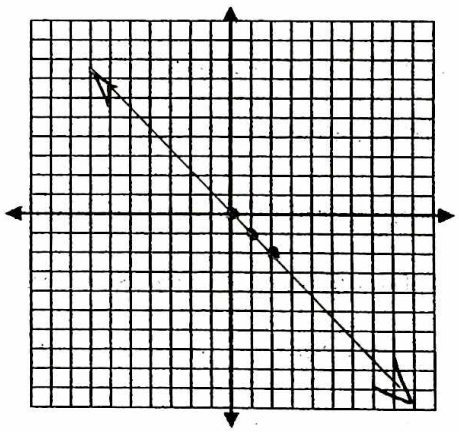
$\frac{5x}{5} = \frac{10}{5}$

$x = 2$

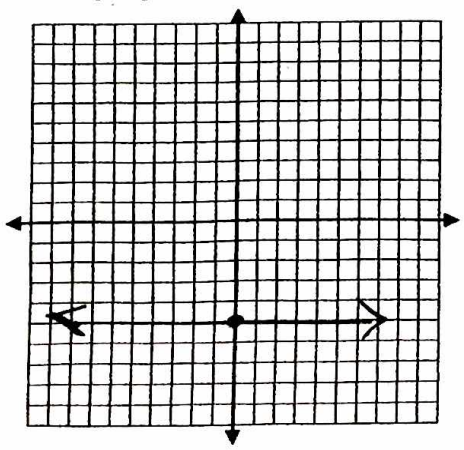
19. Graph y = x



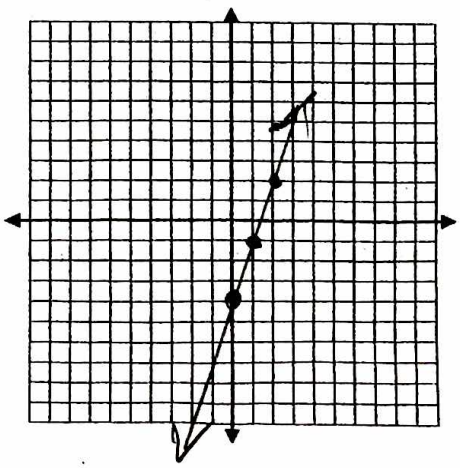
20. Graph y = -x



21. Graph y = -5



22. Graph 3x – y = 4



$3x - y = 4$

$-3x \quad -3x$

$\frac{-y}{-1} = \frac{-3x + 4}{-1}$

$y = 3x - 4$

NAME_____ DATE_____ PERIOD_____

Interpreting Graphs

Greg's Greasy Chicken Palace charges 40 cents for each piece of chicken and a fixed charge of 55 cents for the box. Make a table and write an equation for the amounts of money you will spend.

1. Equation: $p = 0.40c + 0.55$ c = chicken, p = price

2. What is the slope of your line? 0.40

   What does it represent? rate of change per pieces of chicken

3. What is the y-intercept of your line? 0.55

   What does it represent? starting point

4. How much will you spend on 7 pieces of chicken? $3.35

$p = 0.40(7) + 0.55$

$p = \$3.35$

5. If the price of the chicken went up to 70 cents per piece and the charge of the box went up to 90 cents, what would be the new equation?

$p = 0.70c + 0.90$

6. With your new equation from problem #5, how much will you spend on 7 pieces of chicken?

$p = 0.70(7) + 0.90$

$p = \$5.80$

$5.80

The chart show the amount of feet Mrs. Selcer covered chasing disruptive Algebra 1 students as they ran down the halls of CHS.

7. Write an equation to represent her chase.

$d = 5t + 0$

8. What is the slope of the line? 5

9. What does it represent?

rate of change

10. What is the y-intercept of the line? 0

11. What does it represent? starting point

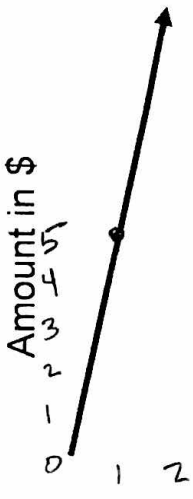
12. Finish the table.

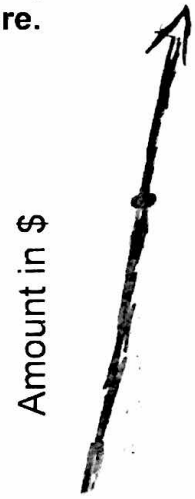
Time(sec)	Feet
2	10
4	20
8	40
10	50
14	70

2 < , > 10

$m = \frac{10}{2} = 5$

The graph below represents what you will earn if you work part time wrapping presents during the Christmas season at a local department store.



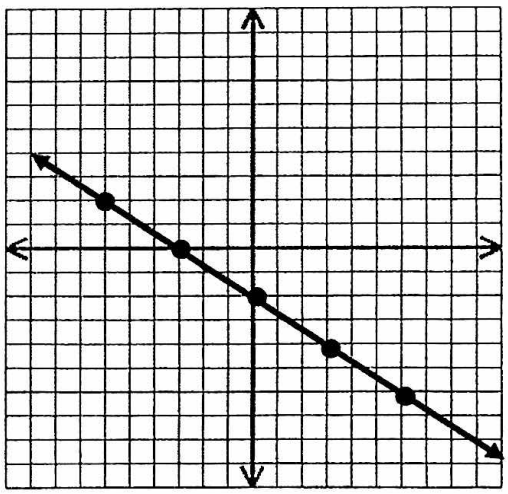


13. What is the rate of pay? $5 What does that represent? amount earned per hour

14. What is the y-intercept of this line? 0 What does that represent? amount earned without working

15. Redraw the graph to represent how much you will make if you get a 2 dollar an hour raise.

16. Write the equation of the line in the graph below. y = 7x + 0



17. What would be the slope of the line parallel to the line in # 16?

_____

18. What would be the slope of the line perpendicular to the line in # 16?

_____

Write the equation of the line given the following information.

19. parallel to $y = \frac{1}{3}x + 2$ and through the point $(6, -3)$ _____

20. perpendicular to $y = \frac{1}{3}x + 2$ and through the point $(-4, 9)$ _____