

Name _____

CAR INFORMATION

Sale Price of Item _____

Value of Item _____

Value Increase/Decrease Rate _____

Credit Score – Interest Rate- Note: Rates are based on individual income of \$40,000-\$55,000. We will use for all incomes.

Credit Score	Interest Rate Car / House
400-500	21.9% / 10.27%
501-550	17.2% / 5.4 %
551-600	14.8% / 4.9 %
601-650	11.4% / 4.4 %
651-700	7.25% / 4.1 %
701-750	6.2% / 3.5%
751-800	4.3% / 2.8%

Terms and Conditions of Loan.

Your loan is based off a _____ year payment schedule. Total Months _____

Monthly Payment _____

The value of the item depreciates/appreciates at a rate of _____ per year

$$F(x) = P(1 + r)^t$$

What is the value when you are the owner of the item? _____

HOUSE INFORMATION.

Sale Price of Item _____

Value of Item _____

Value Increase/Decrease Rate _____

Terms and Conditions of Loan.

Your loan is based off a _____ year payment schedule. Total Months _____

Monthly Payment _____

The value of the item depreciates/appreciates at a rate of _____ PER YEAR

$$F(x) = P(1 + r)^t$$

What is the value when you are the owner of the item? _____

Thinking Ahead:

You earn _____ a year; the government taxes about 34% of your earnings. What is your monthly salary? _____.

Car Insurance : \$89.00/month Cell Phone: \$79.00/month Cable: \$100/month Internet: \$30/month

Electricity: \$80.00/month Student Loan: \$350.00/Month Car: _____ / Month:

House: _____ /month Gas: \$100/Month

Determine your monthly salary. Note if your yearly salary is less than \$20,000 you do not have a student loan payment.

What is your remaining monthly income after your bills are paid? _____

You make: \$93,000.00 a year

Your credit score is: 710

The car you are trying to purchase is valued at \$1000.00 less than its sale price.

Car value depreciates at a rate of 17%

The house you wish to purchase appreciates at a value of 2.3%. The current value of your house is the same as the sale price of the house.

You make: \$16,000.00 a year

Your credit score is: 500

The car you are trying to purchase is valued at \$1500.00 less than its sale price.

Car value depreciates at a rate of 17%

The house you wish to purchase appreciates at a value of 2.3%. The current value of your house is the same as the sale price of the house.

You make: \$125,000.00 a year

Your credit score is: 765

The car you are trying to purchase is valued at \$500.00 less than its sale price.

Car value depreciates at a rate of 17%

The house you wish to purchase appreciates at a value of 2.3%. The current value of your house is the same as the sale price of the house.

You make: \$27,000.00 a year

Your credit score is: 600

The car you are trying to purchase is valued at \$2000.00 less than its sale price.

Car value depreciates at a rate of 17%

The house you wish to purchase appreciates at a value of 2.3%. The current value of your house is the same as the sale price of the house.

Student _____

Class _____

Date _____

1. The equation $y = 30x$ represents the amount of money Ben has saved after x weeks. The table below shows the amount of money Lisa has saved over a few weeks.

Lisa's Savings

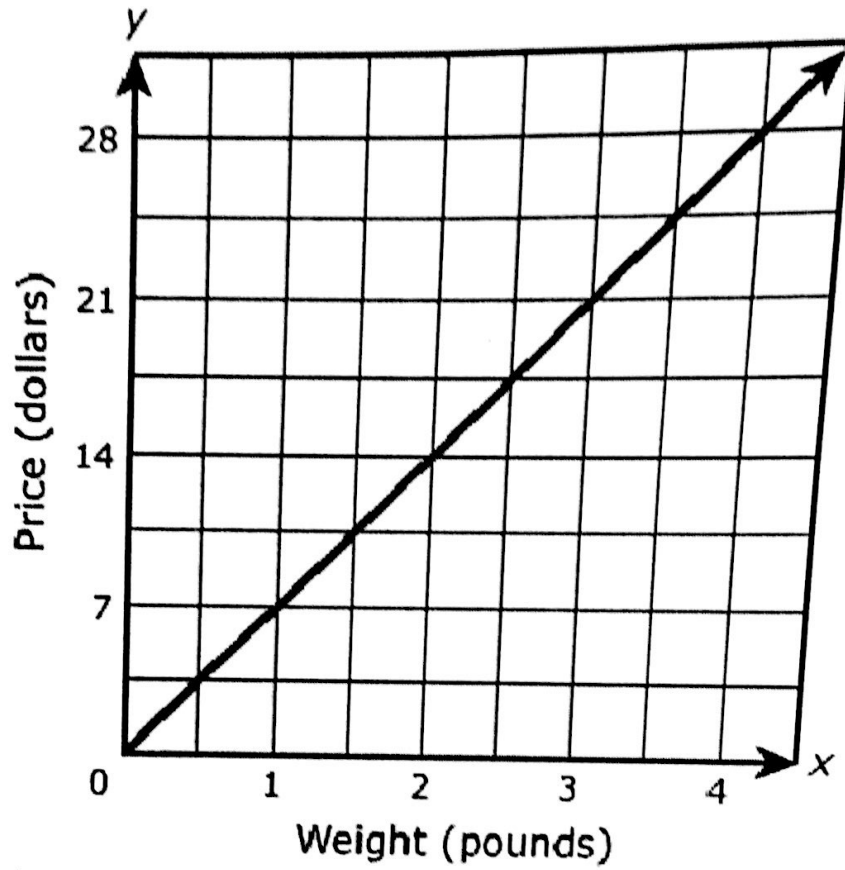
Number of Weeks	Amount Saved
2	\$50
4	\$100
6	\$150

Which statement is true?

- A. Lisa saves \$20 more per week than Ben.
- B. Lisa saves \$5 more per week than Ben.
- C. Ben saves \$5 more per week than Lisa.
2. A telephone calling card charges a connection fee, plus a charge per minute. A 10-minute call costs \$2.99. A 15-minute call costs \$3.99. What is the cost for a 30-minute phone call?
- A. \$8.97
- B. \$7.98
- C. \$6.99
- D. \$5.99

3. The graph shows the cost of purchasing pistachio nuts from a farm.

Pistachio Nuts

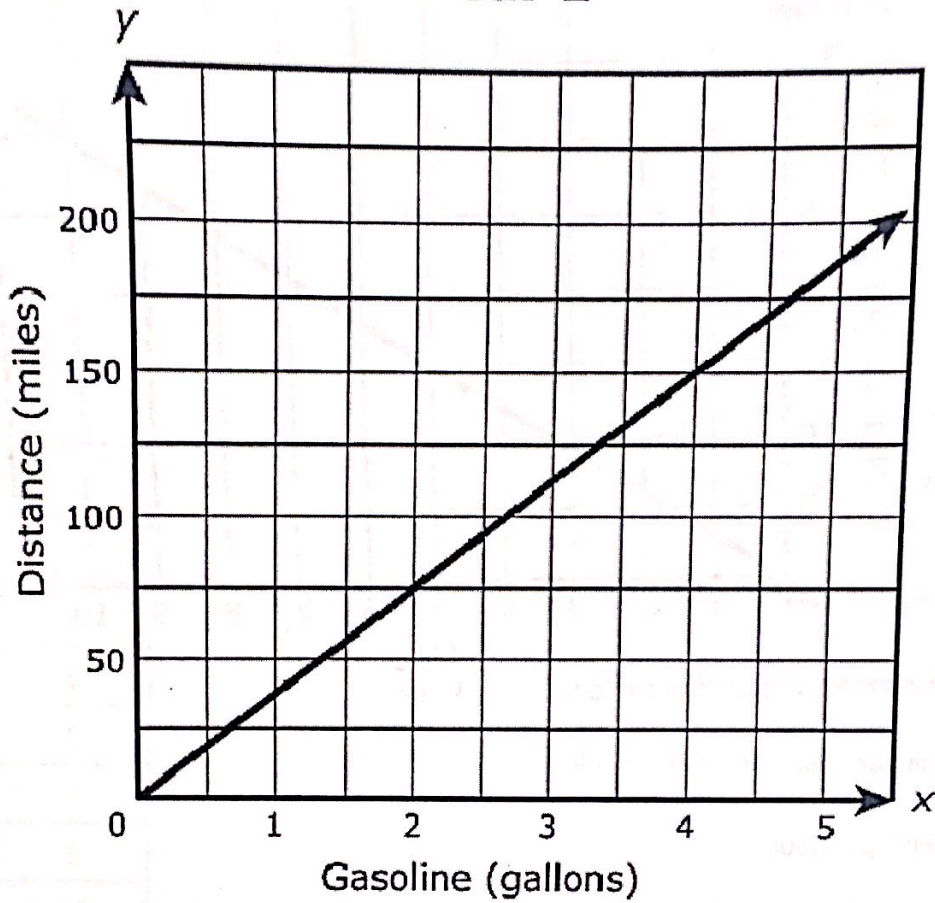


What is the unit price of a pound of pistachio nuts?

- A. \$28
- B. \$7
- C. \$4
- D. \$1

A student wants to determine the gasoline usage on the highway of two different cars, Car K and Car L. The gasoline usage for Car K is described by the equation $y = 35x$, where y is the distance traveled in miles and x is the number of gallons of gasoline used. The gasoline usage for Car L is represented by the graph.

Car L

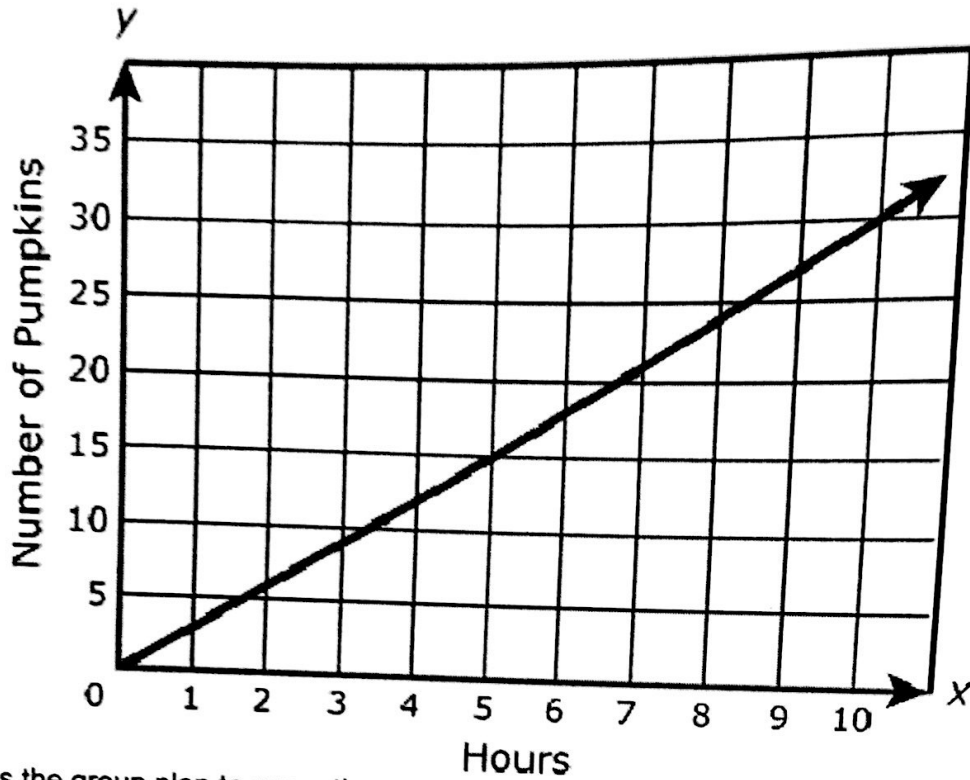


What is the difference in the rates of gasoline usage for the two cars in miles per gallon?

- A. 1.5
- B. 2.5
- C. 15
- D. 37.5

5. A group of students plan to carve a certain number of pumpkins for a contest next week. The graph below represents their plans.

Pumpkins Carved



- At what rate does the group plan to carve the pumpkins?
- A. 3 pumpkins per hour
 - B. 3.2 pumpkins per hour
 - C. 5 pumpkins per hour
 - D. 6.4 pumpkins per hour
6. What is the equation of a line with a slope of 8 that goes through the point (0, 6)?
- A. $y = -8x - 6$
 - B. $y = -6x - 8$
 - C. $y = 6x + 8$
 - D. $y = 8x + 6$

Which table represents a linear function?

A.

x	y
0	-6
1	-2
2	2
3	6

B.

x	y
0	5
1	7
2	11
3	17

C.

x	y
0	2
1	4
2	8
3	16

8. Jack's taxi service charges \$3.00 for pick up and \$2.00 per mile driven. The rates for Taylor's taxi service are shown in the table below.

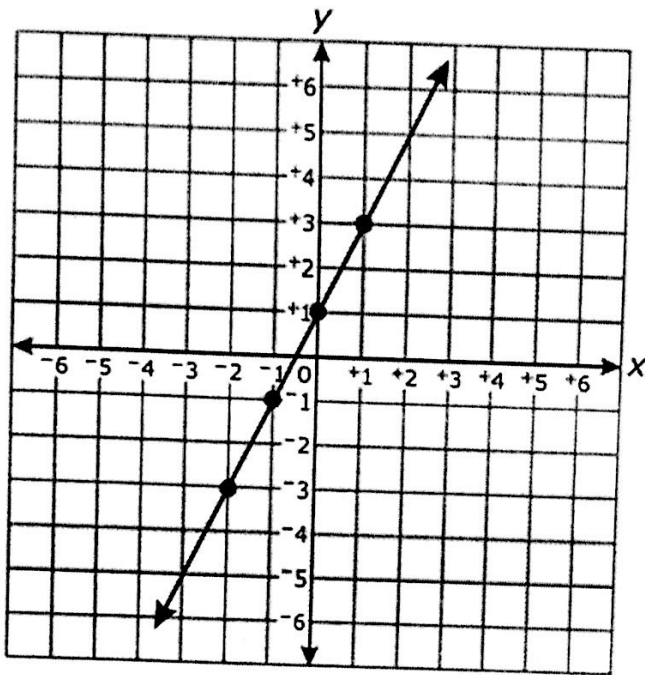
Taylor's Taxi Service

Miles Driven (x)	Cost (y)
2	\$8.00
5	\$17.00
7	\$23.00

Suzanne needs a taxi for 10 miles. Which taxi service will cost less, and by how much?

- A. Jack's taxi service is less by \$6.
- B. Taylor's taxi service is less by \$9.
- C. Jack's taxi service is less by \$9.

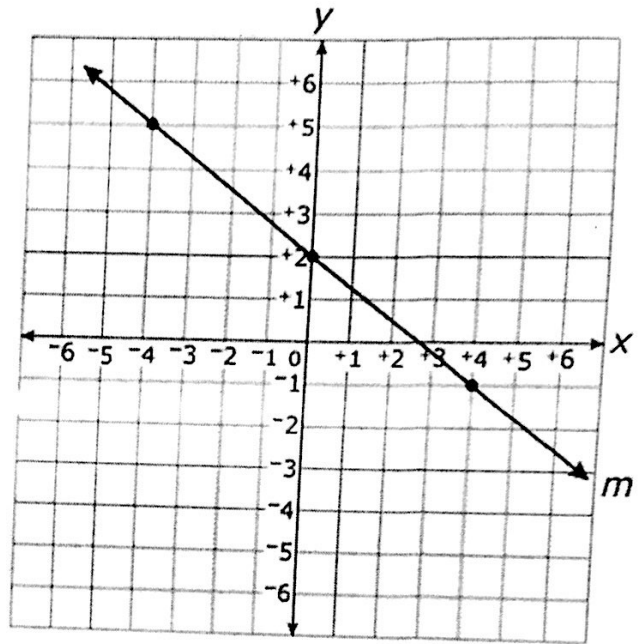
9. Function J is represented by the equation $y = x + 4$. Function K is shown on the graph below.



What is the difference in the slopes of the two functions?

- A. 1
- B. 2
- C. 3

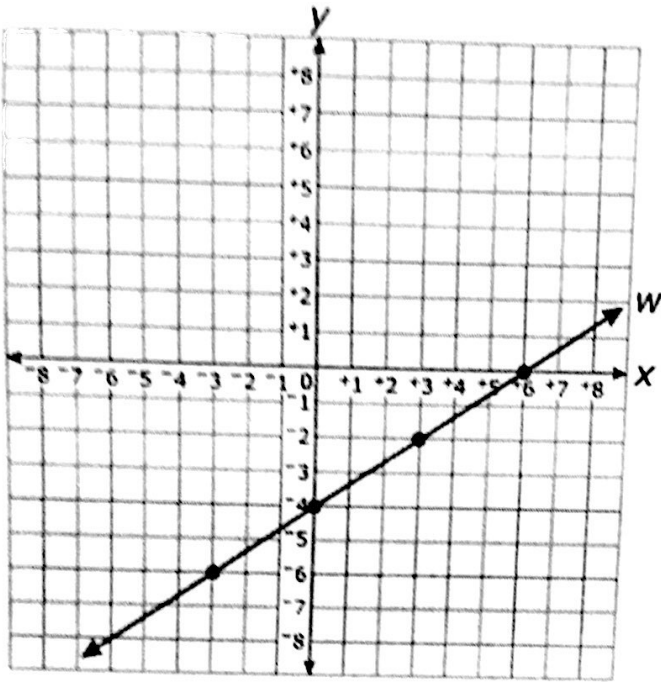
10. Line m is graphed below. Line j will be graphed below. Line j will go through the points $(3, 2)$ and $(5, -4)$.



What is the point of intersection of lines m and j ?

- A. $(0, 2)$
- B. $(3, 0)$
- C. $(4, -1)$

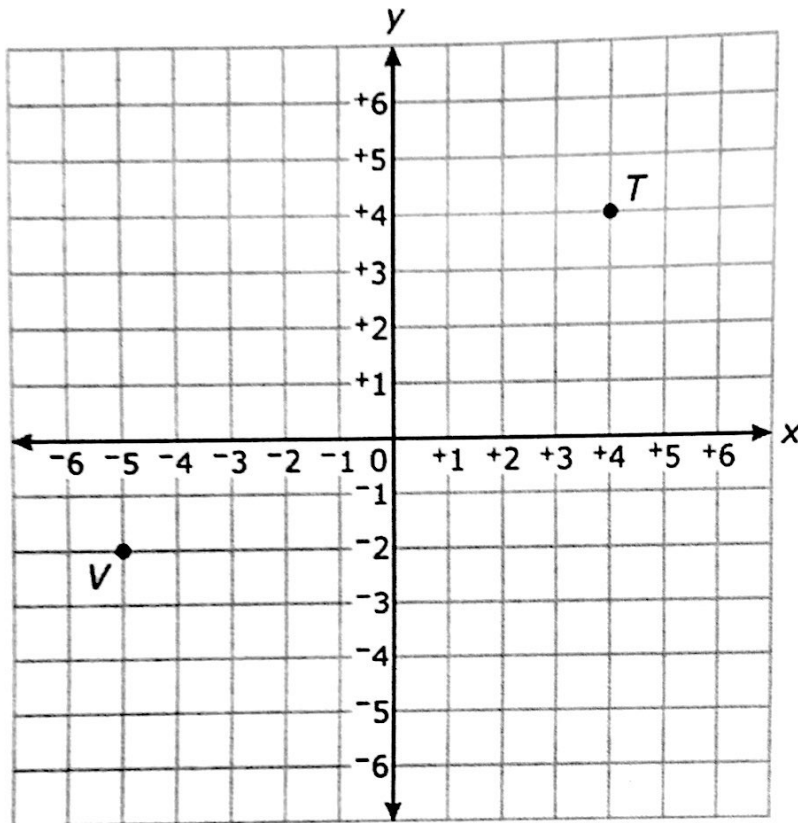
Line w is graphed below. Line z will be graphed below. Line z goes through the points $(2, 1)$ and $(4, -5)$.



What is the point of intersection of lines w and z ?

- A. $(6, 0)$
- B. $(3, -2)$
- C. $(0, -4)$

12. What is the **approximate** distance between points T and V on the graph below?



- A. 9 units
- B. 10 units
- C. 11 units

Average Word Problems

1. Justin earned scores of 85, 92, and 95 on his science tests. What does he need to earn on his next science test to have an average (arithmetic mean) of 93%?
 - a. 93
 - b. 100
 - c. 85
 - d. 96

2. Steve earned a 96% on his first math test, a 74% on his second test, and an 85% on his third test. What is his test average?
 - a. 91%
 - b. 85%
 - c. 87%
 - d. 82%

Consecutive integer word problems

3. Which group of expressions represents three consecutive integers?
 - a. $(x+1)$, $(x+3)$, $(x+5)$
 - b. x , $(2x)$, $(3x)$
 - c. 1 , $x + 2$, $x + 3$
 - d. x , $(x+1)$, $(x+2)$

4. Find three *consecutive integers* whose sum is 21.

Express each equation in terms of y .

5. $Ax + By = C$

7. $3(x + y) = 6$

6. $3y + 4 = 5$

8. $\frac{y}{4} + 5 = 3$

Simplify.

9. $4(x - 3)$ _____

10. $3(x + 6)$ _____

11. $5x - 4 + 4x - 3$ _____

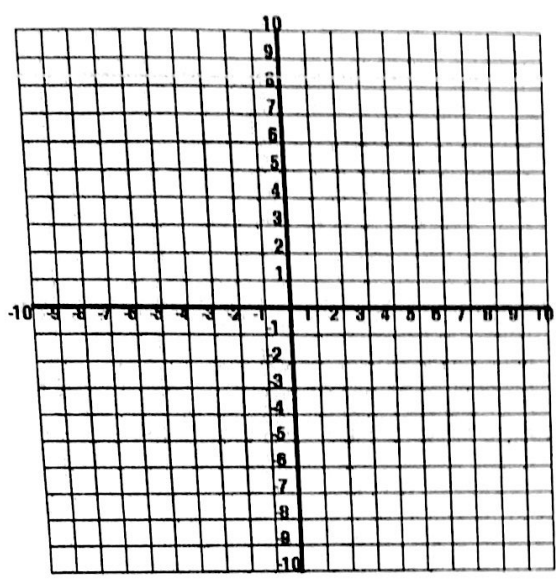
12. $2x + 5x + 3 - 4x$ _____

Use the distributive property to simplify.

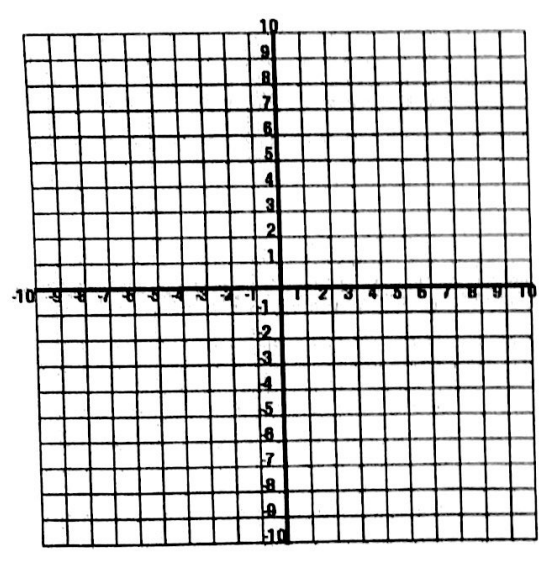
13. $(x + 7)(x + 5)$ _____

14. $(x - 4)(x + 8)$ _____

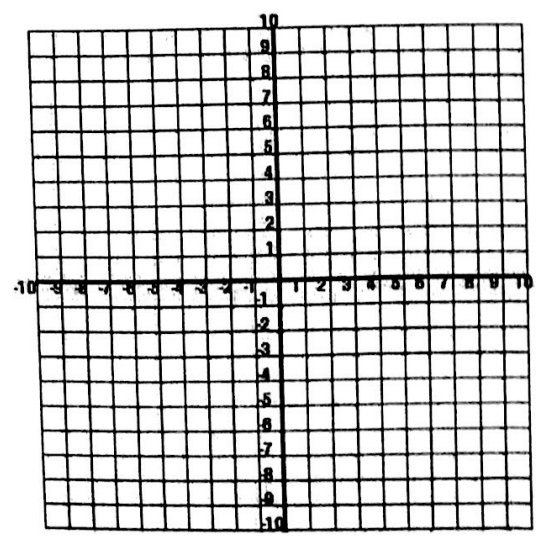
15. $(x - 2)(x + 9)$ _____



16. Graph and draw a line through points $(0, 0)$, $(-3, 3)$, & $(3, 3)$.
- a. Identify the maximum: _____
 - b. Identify the minimum: _____
 - c. Identify the x-intercept: _____
 - d. Identify the y-intercept: _____

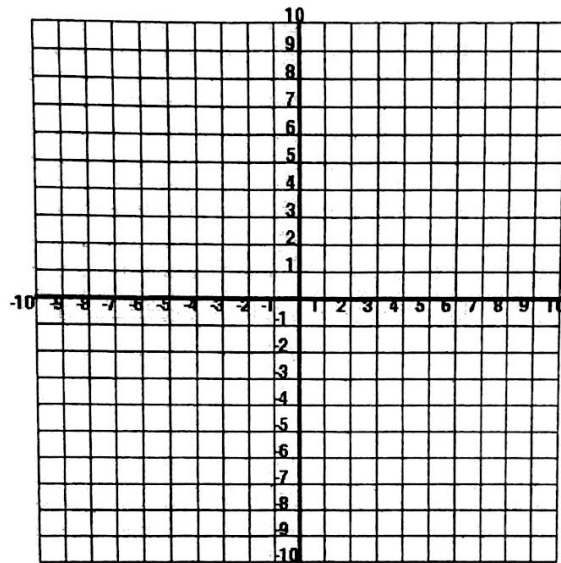


17. Graph and draw a line through points $(0, 0)$, $(-2, 4)$, & $(2, -4)$.
- a. Identify the maximum: _____
 - b. Identify the minimum: _____
 - c. Identify the x-intercept: _____
 - d. Identify the y-intercept: _____



18. Graph and draw a line through points $(0, 2)$, $(3, 0)$, $(6, 2)$ & $(3, 4)$.
- e. Identify the maximum: _____
 - f. Identify the minimum: _____
 - g. Identify the x-intercept: _____
 - h. Identify the y-intercept: _____

19. The *midpoint* of a segment is at $(3, 7)$. One endpoint is at $(1, 4)$. What is the other endpoint?



20. The *endpoint* of a segment is at $(3, 0)$. One endpoint is at $(0, 6)$. What is the midpoint?

