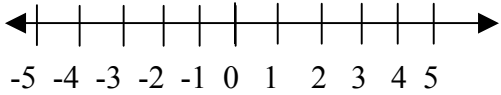
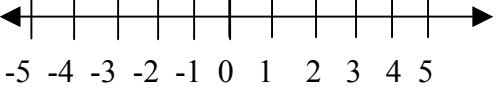
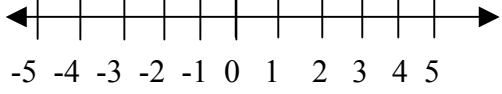
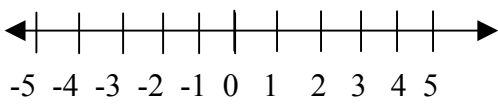
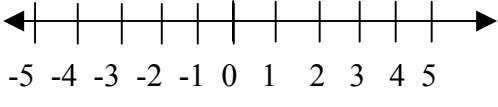
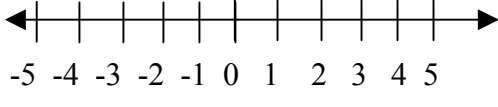
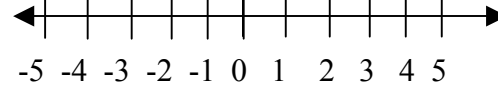


<p>1. Simplify: $-(3x + 4)$</p>	<p>2. Simplify $3x - (4x - 8)$</p>
<p>3. Add $4x^2 + 7x - 12$ <u>$-3x^2 + 14x + 6$</u></p>	<p>4. Add $(x^2 + 3x - 7) + (6x^2 + 11x - 4)$</p>
<p>5. Subtract $(14d^2 + 23d - 7) - (8d^2 - 5d - 12)$</p>	<p>6. Solve and Check $3(x - 9) = 33$</p> <p>Check:</p>
<p>7. Solve and Check: $9r + 7 = 4r - 8$</p> <p>Check:</p>	<p>8. Solve: $6(3x - 5) - 4x = 25 + 3x$</p>
<p>9. Solve: $7 - (4x + 3) = 4(2x - 2)$</p>	<p>10. Graph $x > -3$</p> 
<p>11. Graph: $5 \geq g$</p> 	<p>12. Solve and Graph $3 + k < 7$</p> 

<p>13. Solve and Graph</p> $8p \leq 7p - 2$ 	<p>14. Solve and Graph</p> $14r > -28$ 
<p>15. Solve and Graph</p> $\frac{y}{-2} \leq 2$ 	<p>16. Solve and Graph</p> $3d - 15 > -11 + d$ 
<p>17. Solve: Show all work.</p> <p>The Orioles beat the Yankees by 6 runs. There were a total of 16 runs scored in the game. How many runs did each team get?</p> <p>Define Variables:</p> <p>Write Equations:</p> <p>Substitute:</p> <p>Solve:</p>	

18. Solve: Show all work

You find that one store (Store A) charges three times what another store (Store B) charges for the same shoes. Your friend bought one pair at the expensive store and you bought a pair at the discount store. Together you paid \$124. How much did you each pay?

Define Variables:

Write Equations:

Substitute:

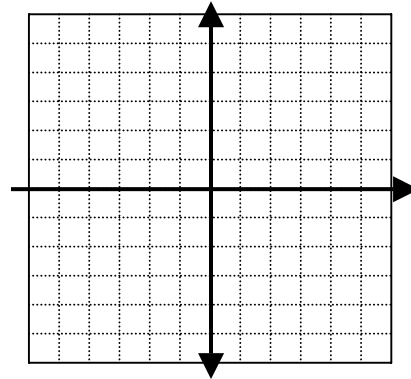
Solve:

19. Graph and label the following points:

A(-2,3) B(-3,-1) C(1,-1) D(-1,2)

E(0,4) F(0,3) G(0,-1) H(-3,0)

I(4,2) J(-3,-3)



20. Complete the table

x	$y = x + 3$	y
-2		
-1		
0		
1		

21. Complete the table

x	$y = -x + 2$	y
-2		
-1		
0		
6		

22. Complete the tables and graph the functions

a. $y = x + 2$

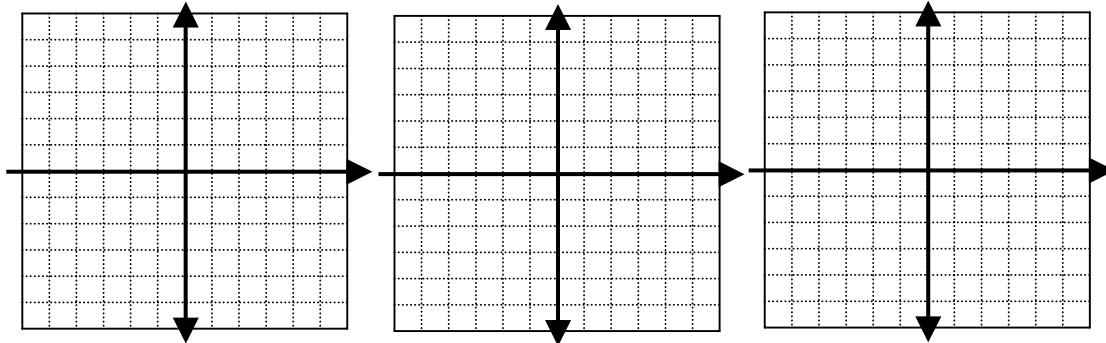
x	y

b. $y = -x - 1$

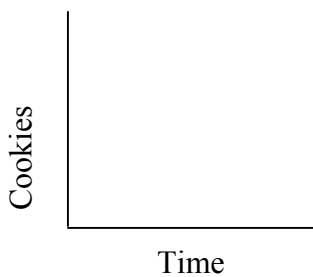
x	y

c. $y = -2x + 1$

x	y



23. Draw a graph to represent the number of cookies in a cookie jar over a period of a week.



24. Determine the domain and range of the following:

$\{ (6, -2), (3, 1), (-6, 0) \}$

Domain: _____

Range: _____

25. Is the following a function?

$\{ (6, -2), (3, -2), (-6, 0) \}$ _____

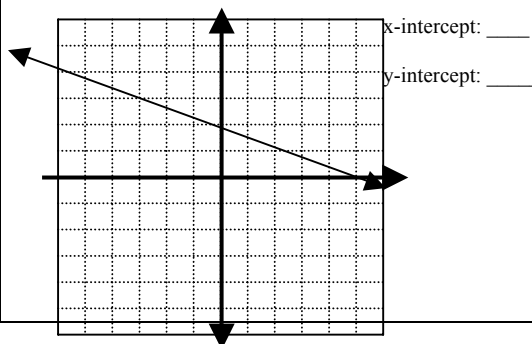
26. Is the following a function?

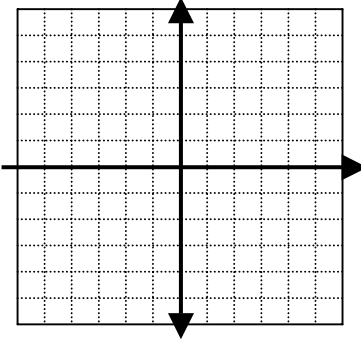
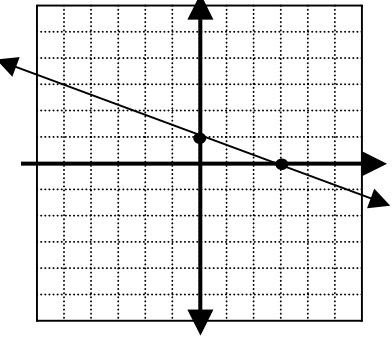
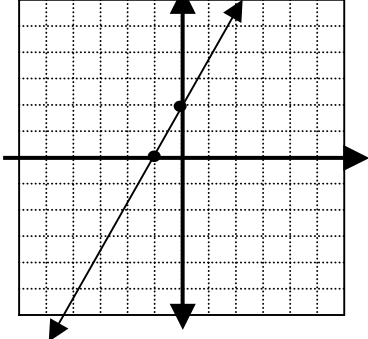
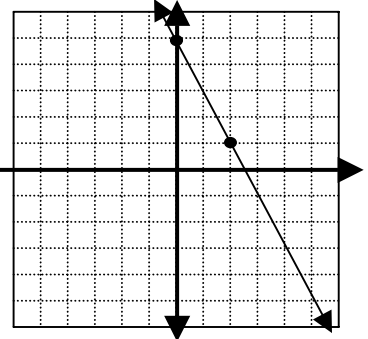
$\{ (2, -2), (3, -2), (3, 0) \}$ _____

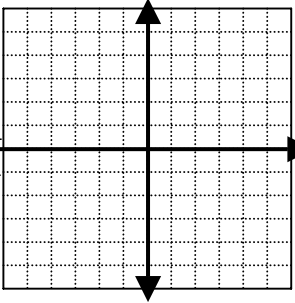
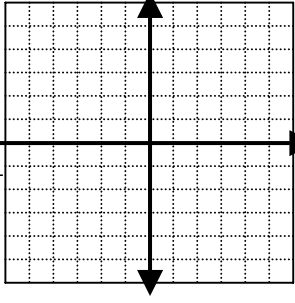
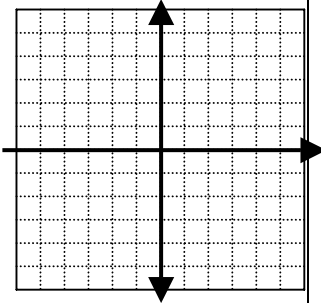
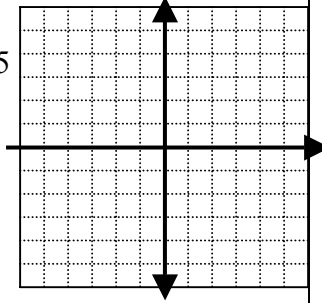
27. Write a word rule for the following:

x	y
-2	1
-1	2
0	3
1	4
2	5

28. Find the x- and y-intercepts.



<p>29. Find the x- and y-intercepts for</p> $y = -3x + 6$ <p>x-intercept = _____</p> <p>y-intercept = _____</p>	<p>30. Is (2,1) a solution to the system</p> $\begin{cases} y = 2x - 3 \\ y = -x + 3 \end{cases}$ <p>Show work:</p> <p>Circle Answer: yes no</p>
<p>31. Find the solution to the system:</p> $\begin{cases} y = x - 4 \\ y = -2x + 2 \end{cases}$ <p>Solution: (,)</p>	
<p>32. What is the slope of the line shown below?</p>  <p>m = _____</p>	<p>33. What is the slope of line shown below?</p>  <p>m = _____</p>
<p>34. What is the slope of the line below?</p>  <p>m = _____</p>	<p>35. Name the slope and y-intercept.</p> $y = -3x - 7$ <p>slope: _____</p> <p>y-intercept: _____</p> <hr/> <p>36. Name the slope and y-intercept:</p> $y = 2x + 6$ <p>slope: _____</p> <p>y-intercept: _____</p>

<p>37. Name the slope and y-intercept.</p> $y = \frac{2}{3}x + 6$ <p>slope: _____ y-intercept: _____</p>	<p>38. Name the slope and y-intercept.</p> $y = -x - 5$ <p>slope: _____ y-intercept: _____</p>
<p>39. Use the slope and y-intercept to graph the following:</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="232 548 808 848"> <p>a) $y = x - 3$</p> <p>slope: _____ y-intercept: _____</p>  </div> <div data-bbox="808 548 1393 848"> <p>b) $y = -\frac{2}{3}x + 5$</p> <p>slope: _____ y-intercept: _____</p>  </div> </div>	
<p>40. Solve for y:</p> $2x + y = 8$	<p>41. Solve for y:</p> $-3x + y = -2$
<p>42. Solve for y:</p> $3x + 3y = -9$	<p>43. Solve for y:</p> $-x - y = 2$
<p>44a. Solve for y and graph:</p> $-4x + y = -2$ 	<p>44b. Solve for y and graph:</p> $-\frac{3}{4}x + y = -5$ 

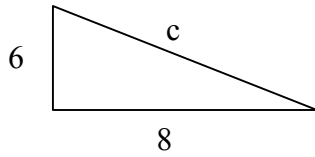
<p>45. Find the slope of the line that passes through the points (3, -1) and (2, -4)</p>	<p>46. Find the slope of the line that passes through the points (7,8) and (3, 11)</p>
<p>47. Find the slope of the line that passes through the points (-2,21) and (-10, 16)</p>	<p>48. Write the ratio 25:5 as a fraction in lowest terms.</p>
	<p>49. Write the ratio 20 to 16 as a fraction in lowest terms.</p>
<p>50. Write the ratio 18:27 as a fraction in lowest terms.</p>	<p>51. Write the ratio 15 to 5 as a ratio in lowest terms.</p>
<p>52. Solve the proportion.</p> $\frac{k}{4} = \frac{15}{20}$	<p>53. Solve the proportion.</p> $\frac{5}{x} = \frac{15}{21}$
<p>53. Solve the proportion.</p> $\frac{10}{20} = \frac{n}{15}$	<p>54. Solve the proportion.</p> $\frac{5}{2} = \frac{12}{w}$
<p>56. If you are paid \$17.00 for working 4 hours, what is your hourly rate of pay?</p>	<p>57. If a car travels 220 miles in 5 hours, what was the car's rate of speed?</p>
<p>58. Circle the better buy.</p> <p><u>Botino's Pizza</u>: \$5.79 for 20 oz.</p> <p><u>Mama Buc's Pizza</u>: \$6.58 for 26 oz.</p>	<p>59. Circle the better buy.</p> <p><u>Bag of Pretzels</u>: \$1.29 for 16 oz.</p> <p><u>Family Size Pretzels</u>: \$2.39 for 26 oz.</p>

<p>60. Write a proportion and solve.</p> <p>If a person creating a video wants the ratio of males to females to be 4:5 and they have already hired 15 females, how many males do they need to hire?</p>	<p>61. Write a proportion and solve.</p> <p>If a cookie recipe requires 2 cups of flour to make 24 cookies, how much flour would you need to make 36 cookies?</p>
<p>62. Write 35% as a fraction in simplest form.</p>	<p>63. Write 28% as a fraction in simplest form.</p>
<p>64. Write $\frac{2}{5}$ as a percent.</p>	<p>65. Write $\frac{17}{20}$ as a percent.</p>
<p>66. What is 67% of 220 ?</p>	<p>67. What is 15% of \$17.00 ?</p>
<p>68. 12% of what number is 42 ?</p>	<p>69. 60% of what number is 73.2 ?</p>
<p>70. 15 is what percent of 20 ?</p>	<p>71. 25 is what percent of 12.5 ?</p>

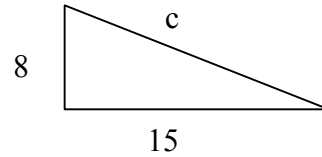
<p>72. A history test has a total of 230 points. How many points are needed to get 80% on this test?</p>	<p>73. 70 students went to Adventure World this spring. This is 20% of the freshman class. How many freshmen are there?</p>
<p>74. Sharif saw a pair of sunglasses for \$120. They were discounted 15%. What was the regular price?</p>	<p>75. Bikes USA is having a sale. Everything in the store is 35% off. The normal cost for a water bottle is \$2.50 and a lock is normally \$21.00. How much would two water bottles and a lock cost after the discount?</p>

1. Circle the correct response. -7 is a whole number True False	2. Circle the correct response. $\sqrt{16}$ is an irrational number. True False
3. Write $\frac{1}{5}$ as a decimal.	4. Write $\frac{2}{9}$ as a decimal.
5. Write $\frac{3}{7}$ as a decimal.	6. Write $\frac{5}{12}$ as a decimal.
7. $\sqrt{144} =$	8. $\sqrt{49} =$
9. Find the answer to the nearest thousandth. $\sqrt{15} =$	10. Find the answer to the nearest thousandth. $\sqrt{245}$
11. Is this number rational or irrational? $\sqrt{169}$	12. Is this number rational or irrational? $\sqrt{28}$
13. Solve for x: $x^2 + 100 = 221$	14. Solve for x: $x^2 + 4 = 13$
15. For triangle ABC, would these lengths represent a right triangle? a = 30, b = 40, c = 50	16. For triangle ABC, would these lengths represent a right triangle? a = 20, b = 30, c = 40

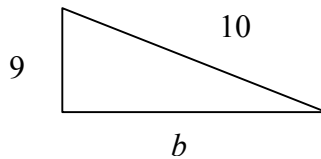
17. For the following diagram, find the missing length.



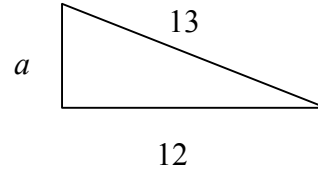
18. For the following diagram, find the missing length.



19. For the following diagram, find the missing length.



20. For the following diagram, find the missing length.



21. Simplify.

$$\sqrt{45}$$

22. Simplify.

$$\sqrt{125}$$

23. Multiply.

$$(\sqrt{8})(\sqrt{2})$$

24. Multiply.

$$(\sqrt{18})(-\sqrt{2})$$

25. Simplify.

$$3\sqrt{12}$$

26. Simplify.



$$17\sqrt{8}$$

27. Multiply.

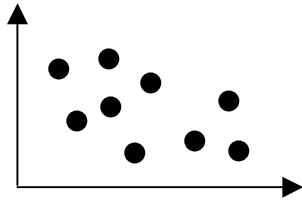
$$(2\sqrt{3})(4\sqrt{17})$$

28. Multiply.

$$(6\sqrt{15})(3\sqrt{6})$$

29. Add. $\sqrt{3} + 4\sqrt{3}$	30. Subtract. $-2\sqrt{15} - 4\sqrt{15}$
31. Add. $2\sqrt{3} + \sqrt{75}$	32. Subtract. $\sqrt{160} - \sqrt{90}$
33. Multiply. (Hint- Use the box method) $(x+5)(x-3)$	34. Multiply. $(x+4)(-2x-5)$
35. Divide. $\frac{-6x^3 + 12x^2 - 18}{-6}$	36. Divide. $\frac{3x^3 + 12x^2 - 21x}{3x}$
37. Draw a scatter plot that would represent positive correlation. 	38. Draw a scatter plot that would represent negative correlation. 

39. For the following, approximate a line of best fit.



40. With one pair of six-sided dice, what is the probability of throwing a sum of 5 ?

41. From a standard deck of playing cards, what is the probability of drawing a face card (Jack, Queen, or King)?

42. A bag contains 13 blue chips, 5 green chips and 6 red chips. What is the probability of selecting a white chip from this bag?