

What is the solution of the system?

- _____ 4. $y = 4x + 7$
 $y = 5x$
a. $(-7, -35)$ b. $(-35, -7)$ c. $(0.8, 3.9)$ d. $(7, 35)$
- _____ 5. $x = -4y - 4$
 $-2y = -5x + 2$
 $z = -5x + 10y$
a. $x = 0, y = -1, z = -10$ c. $x = 0, y = -10, z = -1$
b. $x = -10, y = -1, z = 0$ d. $x = -1, y = 0, z = -10$
- _____ 6. $3x - y = -3$
 $4x - y = -1$
a. $(-2, -3)$ b. $(2, 9)$ c. $(-2, -7)$ d. $(-3, -2)$
- _____ 7. A corner store sells two kinds of baked goods: cakes and pies. A cake costs \$9 and a pie costs \$4. In one day, the store sold 11 baked goods for a total of \$69. How many cakes did they sell?
a. 7 cakes c. 4 cakes
b. 6 cakes d. 5 cakes

How many solutions does the system have?

- _____ 8. $y = 3x + 6$
 $-2y + 6x = 4$
a. one solution c. infinitely many solutions
b. two solutions d. no solution

What is the solution of the system? Use elimination.

- _____ 9. $5x + 3y = 11$
 $x - 3y = -5$
a. $(2, 0.3)$ b. $(1, 2)$ c. $(3, 1)$ d. $(2, 1)$
- _____ 10. The school cafeteria sells two kinds of wraps: vegetarian and chicken. The vegetarian wrap costs \$1.00 and the chicken wrap costs \$2.90. Today they made \$277.40 from the 114 wraps sold. How many of the wraps sold were vegetarian?
a. 86 wraps c. 38 wraps
b. 72 wraps d. 28 wraps

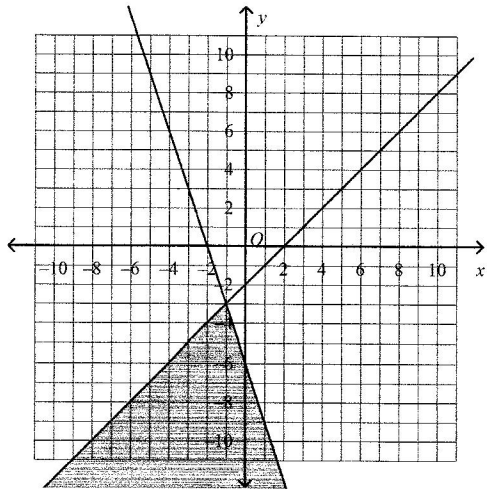
How many solutions does the system have?

- _____ 11. $x + 2y = -2$
 $-4x - 8y = 8$
a. one solution c. infinitely many solutions
b. two solutions d. no solution

- _____ 12. At the local ballpark, the team charges \$5 for each ticket and expects to make \$1,400 in concessions. The team must pay its players \$800 and pay all other workers \$1,800. Each fan gets a free bat that costs the team \$3 per bat. How many tickets must be sold to break even?
- a. 240 tickets b. 2000 tickets c. 600 tickets d. 150 tickets

What system of inequalities is represented by the graph?

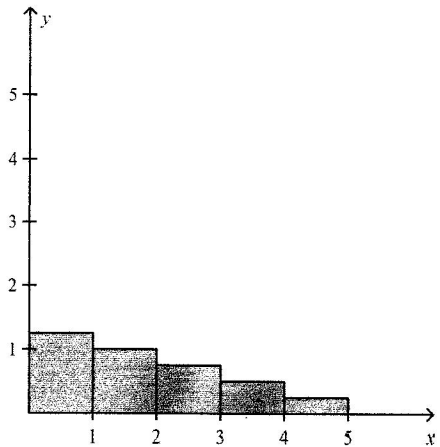
- _____ 13.



- | | |
|-------------------|-------------------|
| a. $y \geq x - 2$ | c. $y \leq x - 2$ |
| $y \geq -3x - 6$ | $y \leq -3x - 6$ |
| b. $y \leq x + 3$ | d. $y \geq x + 3$ |
| $y \geq 2x - 6$ | $y \leq 2x - 6$ |

Is the histogram *uniform*, *symmetric*, or *skewed*?

- _____ 14.



- a. skewed
b. uniform
c. symmetric

What are the slope and y-intercept of the graph of the given equation?

_____ 15. $y = \frac{10}{7}x + \frac{1}{2}$

- a. The slope is $-\frac{1}{2}$ and the y-intercept is $\frac{10}{7}$.
- b. The slope is $\frac{7}{10}$ and the y-intercept is $-\frac{1}{2}$.
- c. The slope is $\frac{10}{7}$ and the y-intercept is $\frac{1}{2}$.
- d. The slope is $\frac{1}{2}$ and the y-intercept is $\frac{10}{7}$.

What is the slope of the line that passes through the pair of points?

_____ 16. (2, 6), (8, 2)

- a. $-\frac{2}{3}$
- b. $\frac{2}{3}$
- c. $-\frac{3}{2}$
- d. $\frac{3}{2}$

Find the mean, median, and mode of the data set. Round to the nearest tenth.

_____ 17. 6, 12, 8, 15, 11, 2, 7, 4, 7, 9, 1

- a. mean = 7.5,
median = 8,
mode = 7
- b. mean = 6.8,
median = 7,
mode = 7
- c. mean = 7.5,
median = 7,
mode = 7
- d. mean = 6.8,
median = 7,
mode = 8

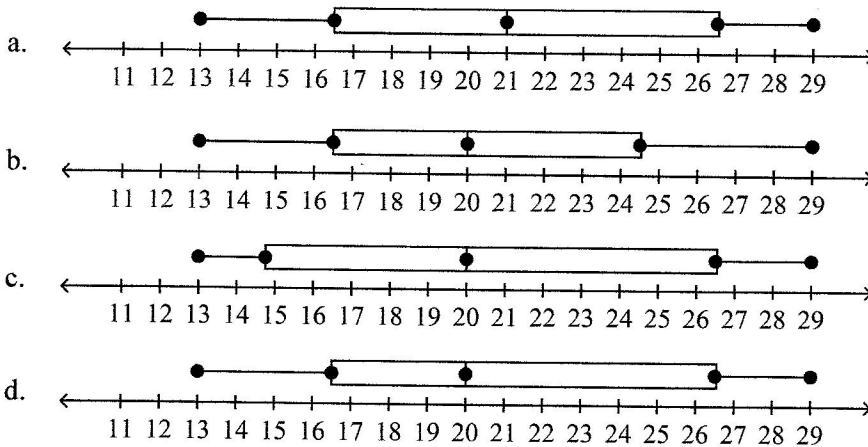
What are the minimum, first quartile, median, third quartile, and maximum of the data set?

_____ 18. 3, 7, 15, 14, 19, 12, 18, 3

- a. minimum 3; first quartile 5; median 13; third quartile 17.75; maximum 19
- b. minimum 3; first quartile 5; median 13; third quartile 16.5; maximum 19
- c. minimum 3; first quartile 4; median 14.75; third quartile 16.5; maximum 19
- d. minimum 3; first quartile 9; median 14.75; third quartile 17.75; maximum 19

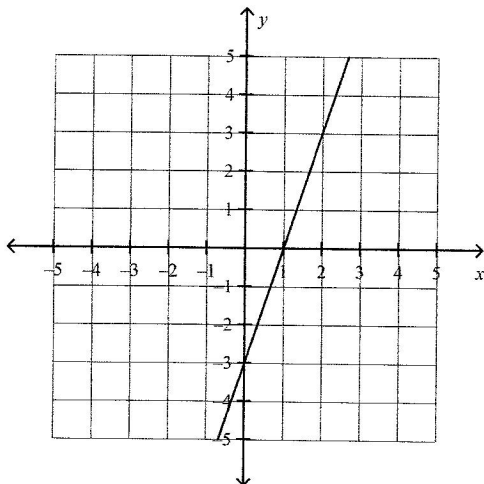
Make a box-and-whisker plot of the data.

19. 28, 29, 18, 20, 25, 20, 15, 13



Find the slope of the line.

20.



- a. $-\frac{1}{3}$ b. -3 c. $\frac{1}{3}$ d. 3

What equation in slope intercept form represents the line that passes through the two points?

21. (5, 8), (9, 2)

- a. $y = \frac{3}{2}x - \frac{31}{2}$ c. $y = \frac{2}{3}x + \frac{31}{2}$
 b. $y = -\frac{2}{3}x - \frac{31}{2}$ d. $y = -\frac{3}{2}x + \frac{31}{2}$

22. Evaluate $\frac{u}{z} + xy^2$, for $u = 12$, $x = 4$, $y = 4$, and $z = 4$.

- a. 67 b. 361 c. 259 d. 112

Name: _____

ID: A

- _____ 23. The table shows the height of a plant as it grows. What equation in point-slope form gives the plant's height at any time?

Time (months)	Plant Height (cm)
3	24
5	40
7	56
9	72

- a. $y - 24 = 8(x - 3)$
b. $y - 24 = 4(x - 3)$
c. $y - 3 = 4(x - 24)$
d. The relationship cannot be modeled.

Find the x - and y -intercept of the line.

- _____ 24. $6x - 9y = 108$
a. x -intercept is -12 ; y -intercept is 18
b. x -intercept is 6 ; y -intercept is -9
c. x -intercept is 18 ; y -intercept is -12
d. x -intercept is -9 ; y -intercept is 6

Essay

What is the solution of the equation?

25. $11 = -12 - 7x$