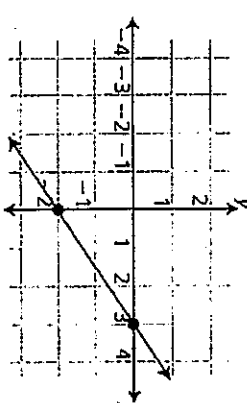
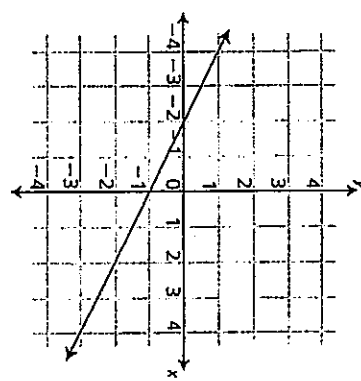


Take Home Quiz #11
Show all work where possible!
Due: _____

1) A line has a slope of $\frac{3}{2}$ and a y-intercept of -2. What is the equation of the line?
 a. $y = \frac{3}{2}x - 2$
 b. $y = -\frac{3}{2}x + 2$
 c. $y = -2x + \frac{3}{2}$
 d. $y = \frac{2}{3}x - 2$

2) What is the slope of the line graphed below?


3) What is the equation of the line graphed below?


4) Which is the equation of the line with a slope of -3 that contains the point (0,3)?
 a. $y = -3x - 3$
 b. $y = 3x + 1$
 c. $y = -3x + 3$
 d. $y = 3x - 1$

5) What is the y-intercept of the equation $-3x + y = 6$? Show work!
 a. (0, 3)
 b. (0, 6)
 c. (3, 0)
 d. (6, 0)

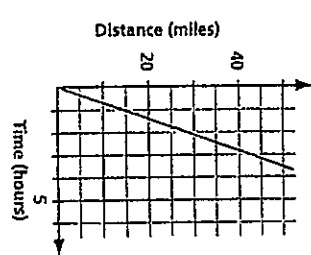
6) What is the slope of the line that fits this data? Show work!

x	y
-1	-3
0	1
1	5
2	9
3	13

 a. $\frac{1}{2}$
 b. 1
 c. 2
 d. 4

7) Find the value of t in this equation. Show work!
 $4t + 6 = 5$

8) If $4x + 3 = -13$, what is the value of x ? Show work!
 a. 4
 b. 22.5
 c. 2.5
 d. -4

9) What proportional relationship can be represented by this graph?


10) Susan rode her bike 30 kilometers in 2.5 hours. How fast did she ride her bike in kilometers per hour? Show work!
 a. 20 km/hr
 b. 12 km/hr
 c. 18 km/hr
 d. 10 km/hr

11) Find the value of x in this equation. Show work!
 $2x + 4 = 10$

12) Which equation has no solution?

- a. $2x + 1 = 6x + 1$
- b. $2x + 4 = 2x + 10$
- c. $3x + 3 = 6x + 6$
- d. $x + 2 \cdot 6 = 4 \cdot 3 + x$

3

13) Choose the system of equations that represents the problem situation below.

Charlie's Canoe Rental charged \$35 per day plus \$9 per hour. Lakeside Canoes charges \$50 per day plus \$6 per hour. Use h for the number of hours and r for the total rental cost.

- a. $r = 6(h + 35)$
- b. $r = 9(h + 35)$
- c. $r = 6h + 35$
- d. $r = 9h + 35$

3

14) Find the value of f in the equation. Show work.

$3f - 2 = 16$

- a. $f = 18$
- b. $f = 6$
- c. $f = 4\frac{2}{3}$
- d. $f = 3$

3

15) Find the value of x in the equation. Show work!

$\frac{x}{3} - 4 = 8$

3

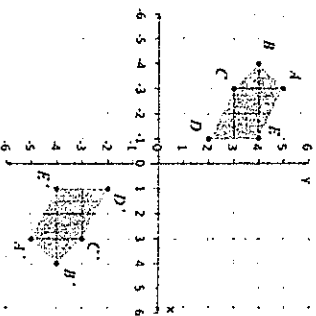
16) What transformation changes the left triangle into the right triangle?



- a. Translation
- b. Reflection over a vertical line.
- c. Reflection over a horizontal line
- d. Dilation

3

17) Which of the following best describes the movement of Figure ABCD to Figure A'B'C'D'?



- a. Reflection in the x-axis
- b. Rotation of 90°
- c. Translation
- d. Rotation of 180°

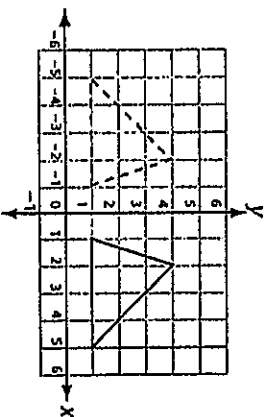
3

18) $\triangle ABC$ is dilated by a scale factor of 2 and is then rotated 90° clockwise. The result is labeled as $\triangle DEF$. Triangles ABC and DEF , must be -

- a. obtuse
- b. similar
- c. congruent
- d. equilateral

3

19) What transformation is shown in this figure?



- a. Reflection in the x-axis
- b. Reflection in the y-axis
- c. Translation 6 units to the left
- d. Rotation of 180°

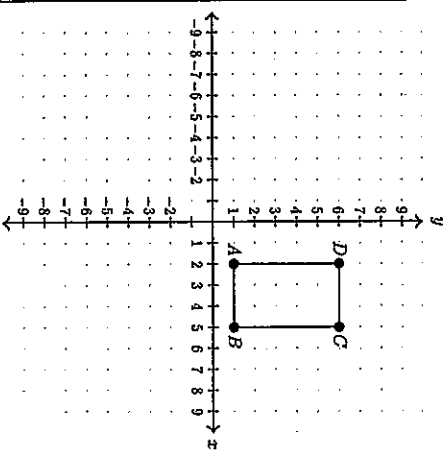
3

21) A triangle in the coordinate plane has vertices $(-4, 1)$, $(3, 1)$, and $(1, 5)$. If the triangle is dilated by a scale factor of 2, what are the coordinates of the vertices of the image?

- $(-4, 1) \rightarrow$ _____
- $(3, 1) \rightarrow$ _____
- $(1, 5) \rightarrow$ _____

9

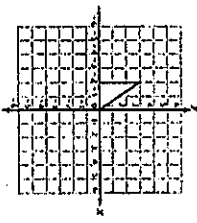
20) Translate the rectangle 4 units right and 2 units up. Write the coordinates of the new image in the spaces provided.



- A'(_____) C'(_____)
- B'(_____) D'(_____)

13

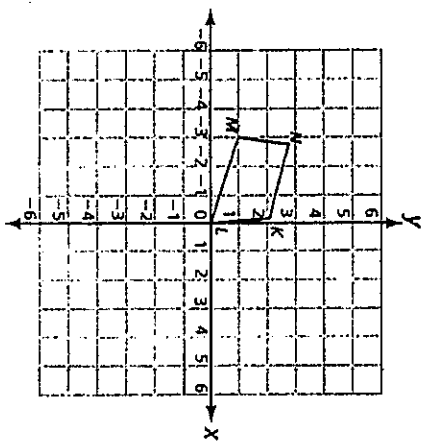
22) If the triangle below is rotated 180° clockwise about the origin, which figure shows the location of the rotated figure?



- a.
- b.
- c.
- d.

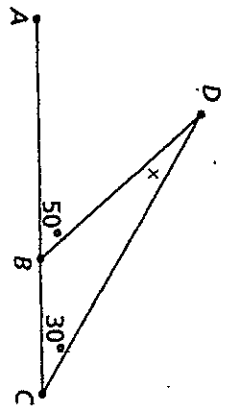
3

23) If the trapezoid is rotated 90° counterclockwise about the origin, what will be the new location of point M?



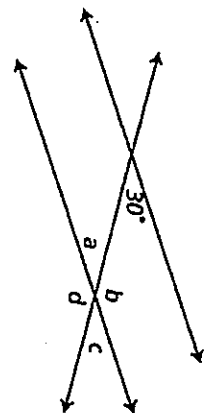
- a. (1, 3)
- b. (-3, -1)
- c. (-1, -3)
- d. (3, 1)

24) What is the value of x in the diagram below? Show work!



3

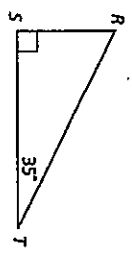
Use the diagram below to answer questions 25 and 26.



25) What is $m\angle a$?

- a. 15°
- b. 60°
- c. 30°
- d. 150°

27) What is the measure of angle R? Show work!



- a. 35°
- b. 65°
- c. 55°
- d. 145°

26) What is $m\angle b$? Show work!

- a. 15°
- b. 60°
- c. 30°
- d. 150°

28) Two angles of a triangle measure 24° and 76°. What is the measure of the third angle? Show work!

- a. 280°
- b. 100°
- c. 140°
- d. 80°

3

3

3

3