Spiral 11/1
Math 8

Name:
Date: $\qquad$ Period: $\qquad$
Directions: Complete the following problems. Show all of your work. You MUST write your answer in the answer blank. Remember to include labels when necessary!

## Answers


9) What is the image of point $(-3,5)$ after a rotation of 90 degrees counterclockwise?
a.) $(-3,-5)$
b.) $(3,5)$
c.) $(5,3)$
d.) $(-5,-3)$
11) Are the figures similar?

13) What is the value of $y$ if $x=5$ ?

| $x$ | 1 | 2 | 4 | 8 | 11 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $y$ | 7 | 10 | 16 | 28 | 37 |

10) Which transformation best describes the image of an object viewed through a microscope?
a. dilation
b. reflection
c. rotation
d. translation

11) What would the y-intercept of line below be if it was shifted 3 units down?

12) A figure is located entirely in the third quadrant. If it is reflected over the $y$-axis, in which quadrant will its image lie?
a. first
b. second
c. third
d. fourth
13) Which describes the transformation?
a. dilation by 2
b. rotation 900
counterclockwise
c. reflection over x-axis

d. translation up 2 units
14) What is the image of point $(4,-2)$ after a dilation of 3 ?
a. $(12,-6)$
b. $(7,1)$
c. $(1,-5)$
d. $(4 / 3,-2 / 3)$
15) The marching band enters the gym and marches across the gym without turning.
Which of these describes the transformation?
a. dilation
b. reflection
c. rotation
d. translation
16) $\qquad$
17) $\qquad$
18) $\qquad$
19) $\qquad$
20) $\qquad$
21) $\qquad$
22) $\qquad$
23) $\qquad$
24) $\qquad$
25) $\qquad$
26) $\qquad$
27) $\qquad$
28) $\qquad$
29) $\qquad$
30) GRID RESPONSE


Spiral 11/8
Math 8

Name:
Date: $\qquad$ Period: $\qquad$

Directions: Complete the following problems. Show all of your work. You MUST write your answer in the answer blank. Remember to include labels when necessary!

| 1) What is the slope of the line through the given points? $(3,3)$ and $(4,1)$ | 2) What is the slope of the line through the given points? $(1,6)$ and $(-4,2)$ |
| :---: | :---: |
| 3) If the measure of angle 2 is $23^{\circ}$, what is the measure of angle 4? | 4) If the measure of angle 2 is $23^{\circ}$, what is the measure of angle 8? |
| 5) If the triangles are similar, what is the missing side length? | 6) If the triangles are similar, what is the missing side length? |
| 7) What is the value of $y$ if $x=11$ ? $\begin{array}{lrrrrr} \mathrm{x} & 0 & 2 & 4 & 6 & 8 \\ \mathrm{y} & 3 & 11 & 19 & 27 & 35 \end{array}$ | 8) What is the value of $x$ if $y=31$ $\begin{array}{lrrrrr} \mathrm{x} & 0 & 2 & 4 & 6 & 8 \\ \mathrm{y} & 3 & 11 & 19 & 27 & 35 \end{array}$ |
| 9) The graph of a proportional relationship contains the points $(5,11)$ and $(10,22)$. Is the point $(20,44)$ also on the line? | 10) The graph of a proportional relationship contains the points $(5,11)$ and $(10,22)$. Is the point $(121,21)$ also on the line? |
| 11) A linear function is modeled with $y=3 x+7$. Is the point $(4,6)$ on the graph of the line? Hint: plug the $x$ and $y$ values into the equation. | 12) A linear function is modeled with $y=11 x-3$. Is the point $(-2,-25)$ on the graph of the line? Hint: plug the $x$ and $y$ values into the equation. |
| 13) What is the slope of the line? | 14) What is the slope of the line? |
| 15) What is the measure of angle |  |


| Answers |  |  |  |
| :---: | :---: | :---: | :---: |
| 1) |  |  |  |
| 2) |  |  |  |
| 3) |  |  |  |
| 4) |  |  |  |
| 5) |  |  |  |
| 6) |  |  |  |
| 7) |  |  |  |
| 8) |  |  |  |
| 9) |  |  |  |
| 10) |  |  |  |
| 11) |  |  |  |
| 12) |  |  |  |
| 13) |  |  |  |
| 14) |  |  |  |
| 15) GRID RESPONSE |  |  |  |
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| (3) (3) (3) 3 3 |  |  |  |
| (4) (4) (4) (4) (4) (4) |  |  |  |
| (5) (5) (5) (5) 5 |  |  |  |
| (6) (6) (6) (6) (6) |  |  |  |
| (ㄱ) (1) 17 (7) 17 |  |  |  |
|  |  |  |  |
|  | (9) 9 | (9) | (9) 9 |

Name: $\qquad$
Math 8
Date: $\qquad$ Period: $\qquad$
Directions: Complete the following problems. Show all of your work. You MUST write your answer in the answer blank. Remember to include labels when necessary!


Name: $\qquad$

## Math 8

Date: $\qquad$ Period: $\qquad$
Directions: Complete the following problems. Show all of your work. You MUST write vour answer in the answer blank. Remember to include labels when necessary!

3) What is the rate of change (slope) as seen in the table?

| $x$ | 0 | 2 | 4 | 6 | 8 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| $y$ | 3 | 11 | 19 | 27 | 35 |
| 5) If $x=4$, what is $y$ ? |  |  |  |  |  |
| $x$ | -2 | -1 | 0 | 1 | 2 |
| $y$ | -8 | -6.5 | -5 | -3.5 | -2 |

7) In the following diagram, two parallel lines are cut by a transversal. Name three angles congruent to angle 1.

8) Triangle $A B C$ will be reflected over the $y$-axis. What will be the coordinates of $A^{\prime}$ ?
9) What is the equation of the line?

10) What is the rate of change (slope) as seen in the table?

| $x$ | 4 | 5 | 6 | 7 | 8 |
| :---: | :---: | :---: | ---: | ---: | ---: |
| $y$ | -10 | -13 | -16 | -19 | -22 |

6) If $y=4$, what is $x$ ?

| x | -2 | -1 | 0 | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| y | -8 | -6.5 | -5 | -3.5 | -2 |

8) Using the diagram for question 7, which statement is true?
A. angle $1 \cong$ angle 4
B. angle $3 \cong$ angle 4
C. angle $2 \cong$ angle 7
D. angle $3 \cong$ angle 5
9) Triangle $A B C$ will be reflected over the $y$ axis. What will be the coordinates of $B^{\prime}$ ?

Answers

1) $\qquad$
2) $\qquad$
3) $\qquad$
4) $\qquad$
5) $\qquad$
6) $\qquad$
7) $\qquad$
8) $\qquad$
9) $\qquad$
10) $\qquad$
11) $\qquad$
12) $\qquad$
13) $\qquad$
14) $\qquad$
15) GRID RESPONSE

16) Triangle $A B C$ is translated to Triangle $A^{\prime} B^{\prime} C^{\prime}$. What is the translation from $A B C$ to
 $A^{\prime} B^{\prime} C^{\prime}$ ? (\# of units in which direction?)
17) Simplify:

$$
30 \div(-5)+4 \times(-2)+14
$$

$\square$

Spiral 12/6
Math 8

Name: $\qquad$
Date: $\qquad$ Period: $\qquad$

Directions: Complete the following problems. Show all of your work. You MUST write your answer in the answer blank.

| 1) What is the slope of the line through <br> the given points? $(6,1)$ and $(-4,-2)$ |
| :--- |
| 3) What is the slope of the line through |
| the given points? $(-9,-2)$ and $(-7,-1)$ |

Name: $\qquad$
Math 8
Date: $\qquad$ Period: $\qquad$

## Directions: Complete the following problems. Show all of your work. You MUST write your answer in the answer blank. Remember to include labels when necessary!

1) During a science experiment, the
temperature of a liquid in a beaker started
at $8^{\circ} \mathrm{C}$ and dropped $0.8^{\circ} \mathrm{C}$ every 2 minutes.
Which function models the temperature of
the liquid, $y$, after $x$ minutes?

| A. $y=2.5 x-8$ | B. $y=0.5 x-8$ |
| :--- | :--- |
| C. $y=8-0.4 x$ | D. $y=8-2.5 x$ |

1) During a science experiment, the temperature of a liquid in a beaker started at $8^{\circ} \mathrm{C}$ and dropped $0.8^{\circ} \mathrm{C}$ every 2 minutes. Which function models the temperature of the liquid, y , after x minutes?
A. $y=2.5 x-8$
D. $y=8-2.5 x$
2) Minli's house is located 1.4 miles from her school. When she walks home from school, it takes her an average of 20 minutes. Assuming that Minli walks at a constant rate, which function models Minli's distance from home, y , after x minutes?
A. $y=1.4-0.07 x$
B. $y=1.4-20 x$
C. $y=0.07 x-1.4$
D. $y=20 x-1.4$
3) What dilation technique is used to generate Figure $B$ from Figure $A$ ?
A. by a scale factor of .5
B. by a scale factor of 1.5
C. by a scale factor of 2
4) What dilation technique is used to generate Figure A from Figure B?
A. by a scale factor of .5
B. by a scale factor of 1.5
C. by a scale factor of 2
D. by a scale factor of 2.5
D. by a scale factor of 2.5


5) Which is the equation of the line on the
graph?
A. $y=2 x+1$
B. $y=2 x-2$
C. $y=x+1$
D. $y=x-2$
6) What is the equation of the line on the graph?

7) What is the slope of the line through the given points? $(-7,1)$ and $(5,2)$
8) Solve: $\quad 4 x-15=17-4 x$
9) Solve: $\quad 18=\frac{c+5}{2}$
13)Solve: $-8(1+4 n)+4(n-8)=-12$
10) What is the slope of the line through the given points? $(6,-8)$ and $(0,-4)$
11) Solve: $\quad-5 n-8(1+7 n)=-8$
12) Solve: $-3 x+4=16$
13) Solve: $-158=2-5(-8-8 k)$
14) What is the slope of the line through the given points?
$(5,1)$ and $(-6,-9)$

15) $\qquad$
16) $\qquad$
17) $\qquad$
18) $\qquad$
19) $\qquad$
20) $\qquad$
21) $\qquad$
22) GRID RESPONSE


Name: $\qquad$
Date: $\qquad$ Period: $\qquad$

Directions: Complete the following problems. Show all of your work. You MUST write your answer in the answer blank.

1) What is the slope of the line through the given points? $(-5,7)$ and ( $6,-2$ )
2) Use the following graph for $\# 3,5$, and 7:


What is the slope?
5) Using the graph in \#3, what is the y-intercept?
7) Using the graph in \#3, what is the equation of the line that would pass through the points?
9) Students are selling raffle tickets (x) for a school fundraiser. They have already collected $\$ 500$ plus they will collect $\$ 24$ for every 10 raffle tickets they sell. Which equation models the amount of money they will have collected (y)?
a. $y=24 x+500$
b. $y=2.4 x+500$
c. $y=500 x+24$
d. $y=500 x+2.4$
11) What is the first step in solving the following equation?

$$
5+2(n-3)=7 n
$$

a. Subtract 5 from both sides
b. Add 3 to both sides
c. Divide by 2 on both sides
d. Distribute the 2 to the parenthesis
13) Solve for f: $8 f-12=5 f+12$
15) Solve for x : $5(\mathrm{x}+1)+30=2(\mathrm{x}+10)$
2) What is the slope of the line through the given points? $(8,4)$ and ( $-9,-3$ )
4) Use the following graph for $\# 4,6$, and 8 :


What is the slope?
6) Using the graph in \#4, what is the y-intercept?
8) Using the graph in \#4, what is the equation of the line?
10) Priya is tracking the number of steps she walks. She know that she can walk 6000 steps in 50 minutes and she has already walked 1500 steps. Which equation models the number of steps she takes ( y ) in x minutes?
a. $y=120 x+1500$
b. $y=6000 x+1500$
c. $y=50 x+1500$
d. $y=1500 x+6000$
12) What is the first step in solving the following equation?:

$$
5(r+3)=2 r+6
$$

a. Subtract 5 from both sides
b. Subtract 3 from both sides
c. Subtract $2 r$ from both sides
d. Distribute the 5 to the parenthesis
14) Solve for $a: 2(3 a+2)-4=-8+2 a$
1)

Answers
$\qquad$
3) $\qquad$
4) $\qquad$
5) $\qquad$
6) $\qquad$
7) $\qquad$
8) $\qquad$
9) $\qquad$
10) $\qquad$
11) $\qquad$
12) $\qquad$
13) $\qquad$
14) $\qquad$
15) GRID RESPONSE


