Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Geometry Test Review: Language of Geometry

1. True or False:

A. $∠$1 $≅$ $∠$5 \_\_\_\_\_\_\_\_\_

B. $ ∠$6 $≅$ $∠$8 \_\_\_\_\_\_\_\_\_

C. $∠$7 $≅$ $∠$2 \_\_\_\_\_\_\_\_\_

D. $ ∠$1 $≅$ $∠$7 \_\_\_\_\_\_\_\_\_

2. Name all angles congruent to $∠$1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

$\vec{KM}$ bisects $∠$LKJ

3. $∠$LKM = (6x – 10)° and $∠$JKM = (2x + 30)°

x = \_\_\_\_\_

m$∠$LKM = \_\_\_\_\_\_\_

m$∠$JKM = \_\_\_\_\_\_\_

m$∠$LKJ = \_\_\_\_\_\_\_\_

4. $∠$LKM = (4x + 6)° and $∠$JKM = (2x + 24)°

x = \_\_\_\_\_

m$∠$LKJ = \_\_\_\_\_\_\_\_

M is the midpoint of $\overbar{AB}$

5. $\overbar{AM}$ = 12x, $\overbar{MB}$ = 8x + 24

X = \_\_\_\_\_

$\overbar{AM}$ = \_\_\_\_\_

$\overbar{MB}$ = \_\_\_\_\_\_

$\overbar{AB}$ = \_\_\_\_\_\_\_

6. $\overbar{AM}$ = 5x - 2, $\overbar{MB}$ = 2x + 10

X = \_\_\_\_\_

$\overbar{AM}$ = \_\_\_\_\_

7. $\overbar{AM}$ = 2x + 18, $\overbar{MB}$ = 8x

X = \_\_\_\_\_

$\overbar{AB}$ = \_\_\_\_\_\_\_

8. use the formula ($\frac{x+x}{2}$, $\frac{y+y}{2}$) to find the midpoint of the segment:

Hint:

Write the coordinates (x, y) of the endpoints first!

 9. Find the midpoint of $\overbar{AB}$

B

A

A triangle has coordinates A (2, 1) B (7, 1) and C 2, 4)

10. What is the area of the triangle? (A = $\frac{1}{2}$bh)

11. What is the perimeter of the triangle? (hint – you can use the distance formula or a2 + b2 = c2 to help you!)

 A quadrilateral has the vertices: A (-4, 5) B (7, 5) C (-4, -2) and D (7, 1).

12. What is the area of this shape?

Hints: triangle area: (A = $\frac{1}{2}$bh)

rectangle area A = bh

13. What is the perimeter of this shape? (you may use distance formula or a2 + b2 = c2 to help you).

14. Circle all lines PARALLEL to y = - $\frac{1}{4}$x + 8

Y = 4x + 2 y = $\frac{1}{4}$x – 7 y = -4x + 9 y = - $\frac{1}{4}$x + 2

Y = - $\frac{1}{4}$x – 8 y = 4x + 8 y = 2x – 10 y = $\frac{1}{4}$ + 1

15. circle all lines PERPENDICULAR to y = $\frac{4}{5}$x – 3

Y = $\frac{5}{4}$x + 2 y = - $\frac{5}{4}$x – 3 y = $\frac{4}{5}$x + 2 y = - $\frac{5}{4}$x + 6

16. Write an equation of a line parallel to y = 2x + 1 through (-1, -4) you can use an equation to solve for b or graph.

17. Write an equation of a line parallel to y = $\frac{1}{3}$x – 6 through (6, 3) you can use an equation to solve for b or graph.



18. Write an equation of a line perpendicular to y = 2x + 3 through (4, -2) you can use an equation to solve for b or graph.

19. Write an equation of a line perpendicular to y = - $\frac{1}{3}$x + 2 through (-3, -6). you can use an equation to solve for b or graph.

20. Find the midpoint of segment RT