Honors Geom Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Review Test 1d – Parallelograms & Sp Segments Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Make sure to know the names of, and be able to recognize pictures of the special segments in triangles and their points!! Study them from the quiz. The answers to that are on my blog.

2. Determine if the following are true or false for a parallelogram.

a. \_\_\_\_opposite sides are congruent

b. \_\_\_\_opposite angles are congruent

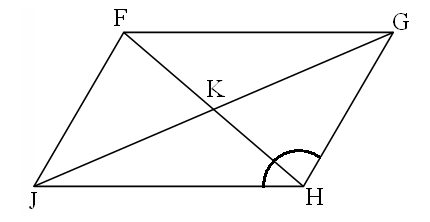
c. \_\_\_\_diagonals bisect each other

d. \_\_\_\_diagonals are perpendicular to each other

e. \_\_\_\_consecutive angles are congruent.

**Use the diagram at right for #s 3 - 6. *JFGH* is a parallelogram.**

3. Find *m*HJF \_\_\_\_\_\_\_\_\_\_\_\_



97o

8

3

15

18

4. Find GJ \_\_\_\_\_\_\_\_\_\_\_\_

5. Find FJ \_\_\_\_\_\_\_\_\_\_\_\_

6. Find *m*GFJ \_\_\_\_\_\_\_\_\_\_\_\_

7. Find x and y in the parallelogram.

x + 1 4y + 9 *x* = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*y* = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6x – 5 3x – 9

8. Find *x* in the parallelogram.

3*x* *x* = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2*x* + 35

9. Find *a* in the parallelogram, then find the measures of ∠H and ∠K

H *a* + 2

K 2*a* - 7

10. KLMN is a rectangle.

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

L

K

5x – 20 LN = \_\_\_\_\_\_\_\_\_\_\_\_\_\_

(3x – 30)o

N

M

11. What is true about the diagonals of a rectangle?

12. Find *x* in the parallelogram.

9*x* + 6 12*x* – 24

13. Given that B, D, & F are midpoints, use the diagram at right to find the following lengths.



AB =

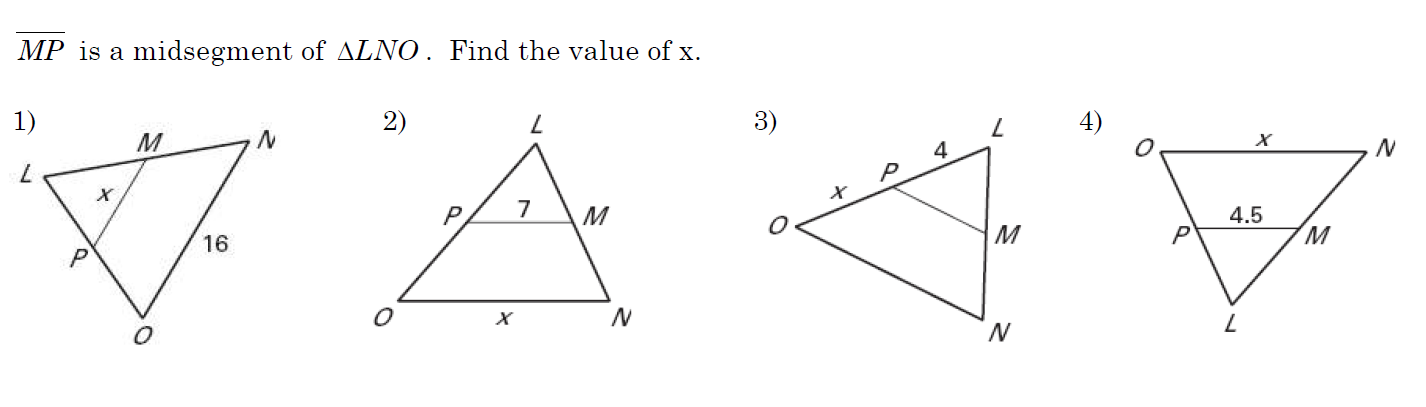
CE =

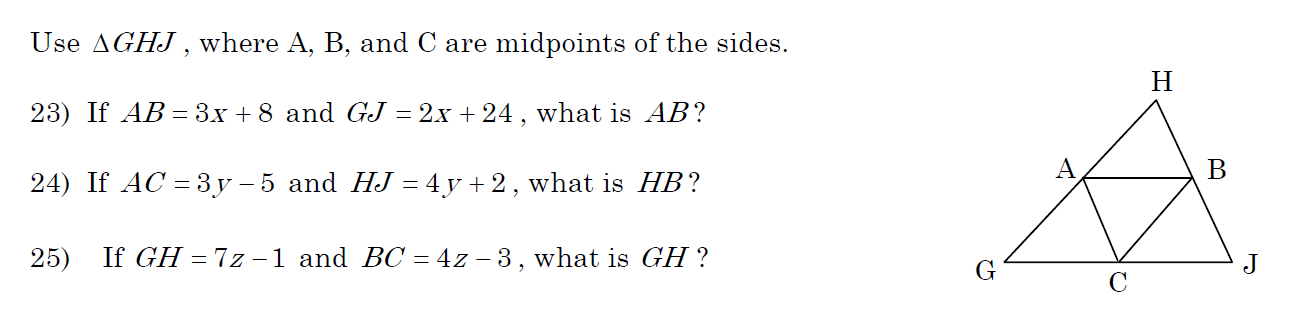
BG =

AG =

AD =

Perimeter of ΔACE =





20. BD is an ∠bisector. Find the measure of ∠ABC.



21. A(3, 2), B(6, 3), & C(-3, -1) are 3 corners of a parallelogram. What are coordinates of the 4th vertex?

Always/Sometimes/Never?

22. A median is a midsegment.

23. A median is a perpendicular bisector

24. A rectangle is a parallelogram

25. A rhombus is a rectangle.

26. A trapezoid is a parallelogram.

27. Diagonals of a parallelogram are congruent.

28. Given: ABCD is an isosceles trapezoid B C

ABCE is a parallelogram

Prove: ∠CED ≅ ∠D A E D

29. Given: ΔADC is isosceles with base AC D

DB is a median C

Prove: DB is an ∠ bisector

B

A