Geometry Name_____

Chapter 5 Quiz Review

Date_____ Period____

State if the three numbers can be the measures of the sides of a triangle.

1) 9, 6, 3

2) 11, 6, 15

3) 14, 7, 10

4) 3, 11, 12

Two sides of a triangle have the following measures. Find the range of possible measures for the third side.

5) 10, 10

A) $2 < x < 20$ B) $0 < x < 18$
C) $0 < x < 20$ D) $0 < x < 16$
E) $0 < x < 19$

6) 10, 12

A) $3 < x < 18$ B) $3 < x < 21$
C) $3 < x < 22$ D) $2 < x < 22$
E) $2 < x < 19$

7) 11, 12

A) $1 < x < 22$ B) $2 < x < 22$
C) $1 < x < 20$ D) $1 < x < 23$
E) $1 < x < 19$

8) 9, 11

A) $2 < x < 19$ B) $2 < x < 18$
C) $6 < x < 19$ D) $4 < x < 19$
E) $2 < x < 20$

9) 10, 6

A) $4 < x < 14$ B) $5 < x < 13$
C) $4 < x < 13$ D) $4 < x < 16$
E) $8 < x < 15$

10) 11, 6

A) $6 < x < 17$ B) $9 < x < 16$
C) $8 < x < 13$ D) $8 < x < 15$
E) $5 < x < 17$

11) 7, 9

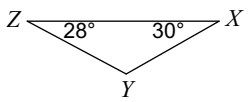
A) $5 < x < 16$ B) $6 < x < 16$
C) $5 < x < 15$ D) $4 < x < 15$
E) $2 < x < 16$

12) 6, 12

A) $7 < x < 18$ B) $6 < x < 14$
C) $6 < x < 18$ D) $6 < x < 17$
E) $10 < x < 15$

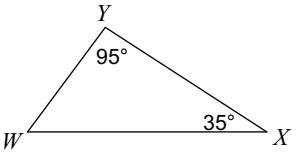
Order the sides of each triangle from shortest to longest.

13)



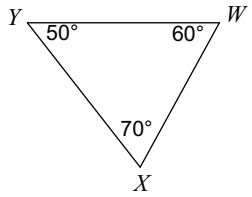
A) $\overline{XZ}, \overline{XY}, \overline{YZ}$
B) $\overline{XY}, \overline{YZ}, \overline{XZ}$
C) $\overline{YZ}, \overline{XY}, \overline{XZ}$
D) $\overline{XZ}, \overline{YZ}, \overline{XY}$
E) $\overline{YZ}, \overline{XZ}, \overline{XY}$

14)



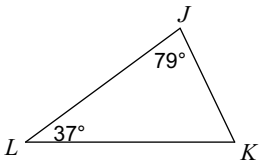
A) $\overline{XW}, \overline{YX}, \overline{YW}$
B) $\overline{YW}, \overline{YX}, \overline{XW}$
C) $\overline{YW}$ and $\overline{YX}$; $\overline{XW}$
D) $\overline{XW}, \overline{YW}, \overline{YX}$
E) $\overline{YW}, \overline{XW}, \overline{YX}$

15)



A) $\overline{WX}, \overline{XY}, \overline{WY}$
B) $\overline{XY}, \overline{WY}, \overline{WX}$
C) $\overline{WY}, \overline{WX}, \overline{XY}$
D) $\overline{WY}, \overline{XY}, \overline{WX}$
E) $\overline{XY}, \overline{WX}, \overline{WY}$

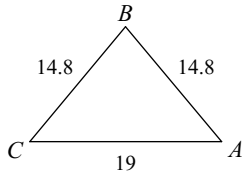
16)



A) $\overline{JL}, \overline{KL}, \overline{JK}$
B) $\overline{JL}, \overline{JK}, \overline{KL}$
C) $\overline{JK}, \overline{KL}, \overline{JL}$
D) $\overline{JK}, \overline{JL}, \overline{KL}$
E) $\overline{KL}, \overline{JL}, \overline{JK}$

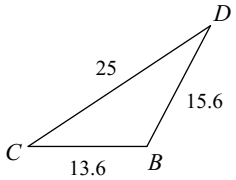
Name the largest and smallest angle in each triangle.

17)



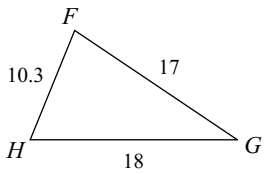
A) $\angle C, \angle A$
B) $\angle A$; $\angle C$ and $\angle B$
C) $\angle B$; $\angle C$ and $\angle A$
D) $\angle A, \angle B$
E) $\angle C$; $\angle B$ and $\angle A$

18)



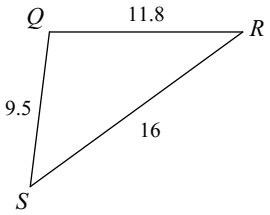
A) $\angle C, \angle D$
B) $\angle B$; $\angle C$ and $\angle D$
C) $\angle C, \angle B$
D) $\angle B, \angle D$
E) $\angle D, \angle B$

19)



A) $\angle F, \angle H$ B) $\angle G, \angle F$
C) $\angle G, \angle H$ D) $\angle H, \angle G$
E) $\angle F, \angle G$

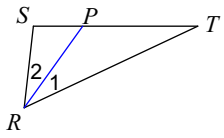
20)



A) $\angle R, \angle S$ B) $\angle Q$; $\angle R$ and $\angle S$
C) $\angle S, \angle Q$ D) $\angle Q, \angle R$
E) $\angle Q, \angle S$

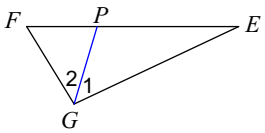
Each figure shows a triangle with one of its angle bisectors.

21) Find x if $m\angle 2 = 28x + 1$ and $m\angle TRS = 58x$.



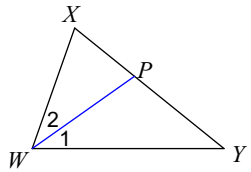
A) 8 B) 1 C) 10
D) 7 E) 3

22) $m\angle 2 = 13x - 4$ and $m\angle 1 = 11x + 4$. Find x.



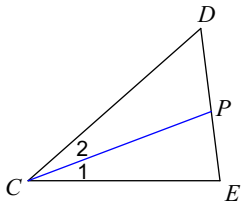
A) 6 B) 4 C) 1
D) 7 E) 9

23) $m\angle 1 = 11x + 2$ and $m\angle 2 = 12x - 1$. Find $m\angle 1$.



A) 35° B) 40° C) 56°
D) 80° E) 97°

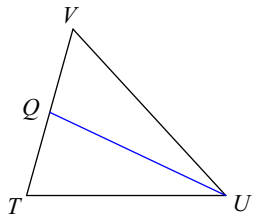
24) $m\angle 1 = 3x + 5$ and $m\angle 2 = -5 + 5x$. Find $m\angle 2$.



A) 96° B) 65° C) 20°
D) 81° E) 34°

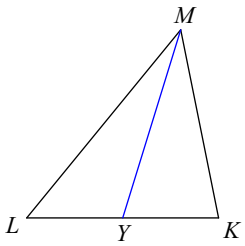
Each figure shows a triangle with one or more of its medians.

25) Find QT if $VT = 22$



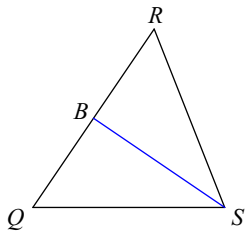
A) 16.5 B) 5.5
C) 3.67 D) 11
E) 7.33

26) Find x if $YK = x + 1$ and $YL = 2x - 6$



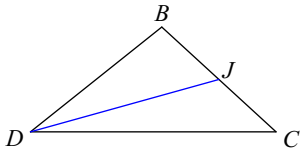
A) 7 B) 5 C) 10
D) 5.2 E) 9

27) Find BQ if $RQ = 2x - 1$ and $BQ = \frac{1}{2}x + 1$



A) 3.75 B) 1.67 C) 5
D) $\frac{5}{2}$ E) 2.5

28) Find JC if $JB = 2x - 2$ and $JC = x + 3$



A) 12 B) 8 C) 4
D) 24 E) 2.67

29) Draw a picture of a median. What is the point of concurrency of all medians?

30) Draw a picture of a perpendicular bisector. What is the point of concurrency of all perpendicular bisectors?

31) Draw a picture of an altitude. What is the point of concurrency of all altitudes?

32) Draw a picture of an angle bisector. What is the point of concurrency of all angle bisectors?