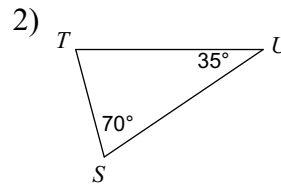
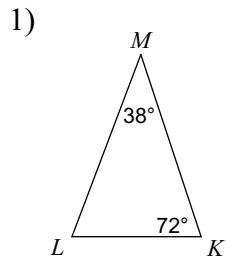
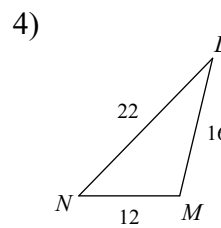
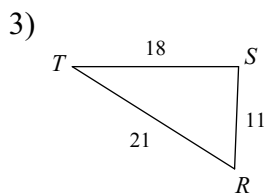


Unit Review

Order the sides of each triangle from shortest to longest.



Order the angles in each triangle from smallest to largest.

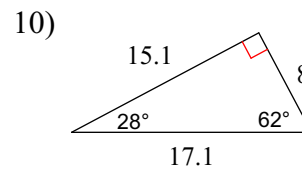
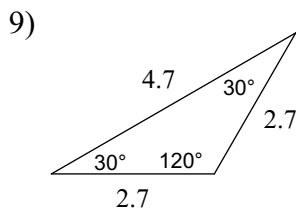
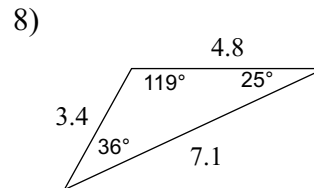
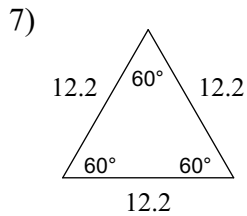


State if the three numbers can be the measures of the sides of a triangle.

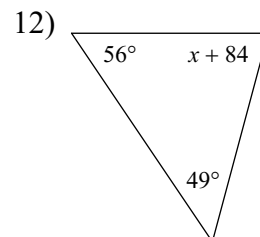
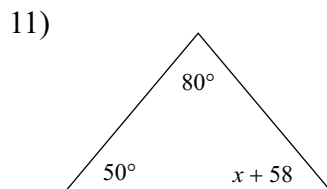
5) 7, 19, 10

6) 21, 10, 12

Classify each triangle by its angles and sides.

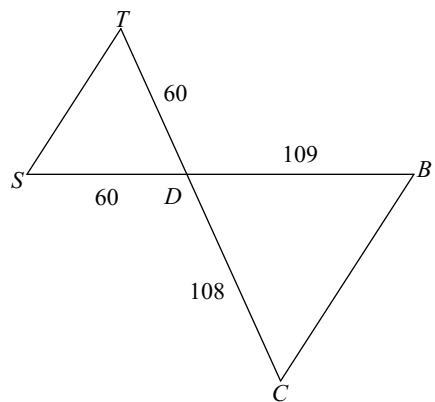


Solve for  $x$ .



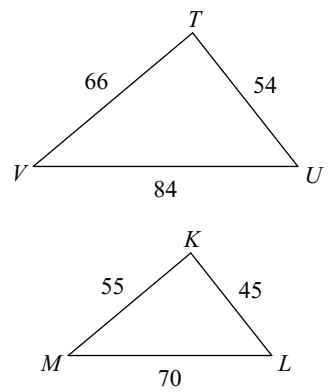
State if the triangles in each pair are similar. If so, state how you know they are similar and complete the similarity statement.

13)



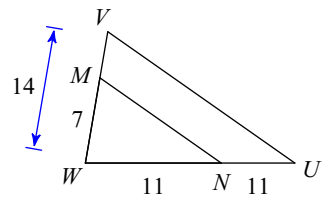
$\triangle DCB \sim$  \_\_\_\_\_

14)



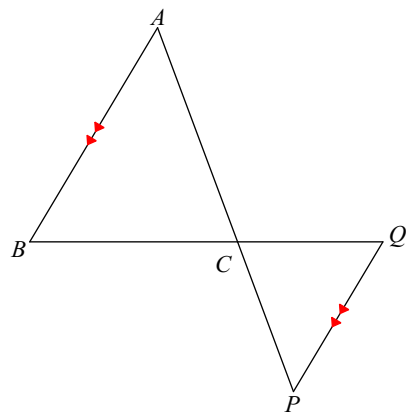
$\triangle TUV \sim$  \_\_\_\_\_

15)



$\triangle WVU \sim$  \_\_\_\_\_

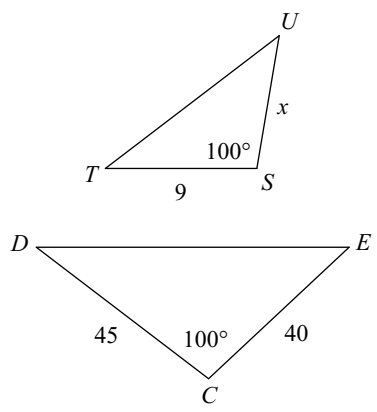
16)



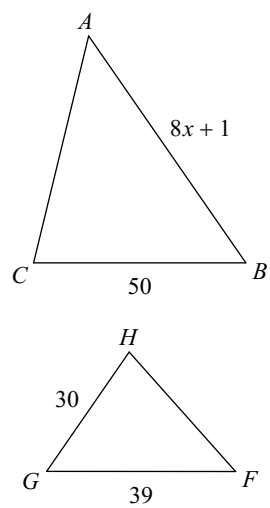
$\triangle CBA \sim$  \_\_\_\_\_

Solve for  $x$ . The triangles in each pair are similar.

17)

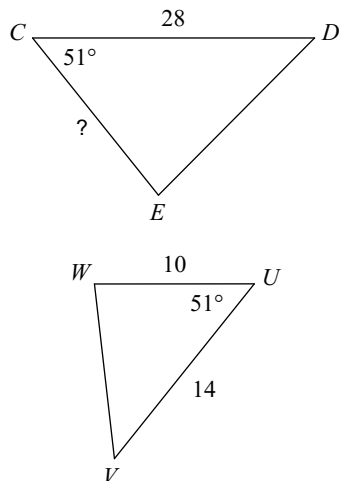


18)

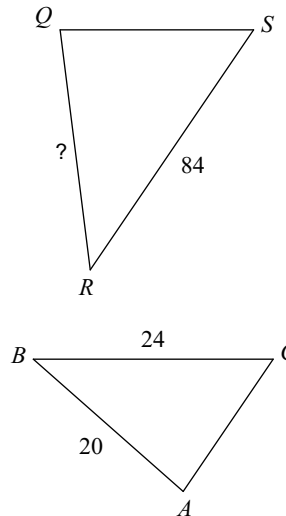


Find the missing length. The triangles in each pair are similar.

19)

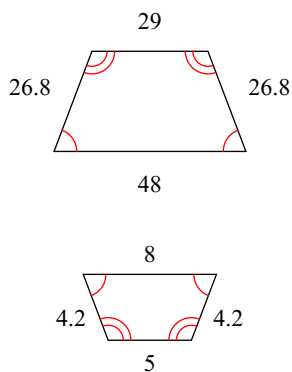


20)

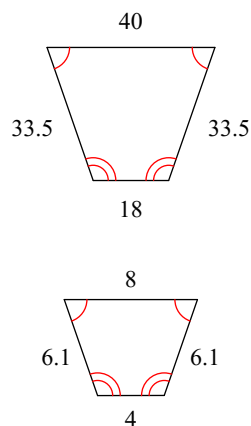


State if the polygons are similar. If so, give the scale factor.

21)

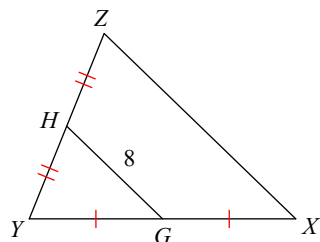


22)

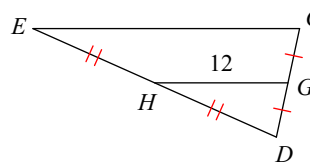


Find the missing length indicated. Notice the inside line is a midsegment.

23) Find  $XZ$

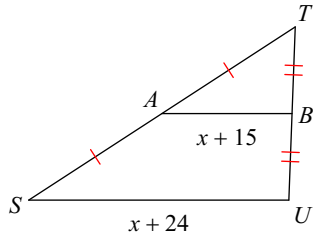


24) Find  $CE$

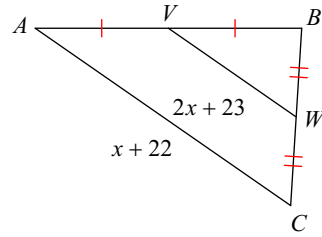


Solve for  $x$ .

25)

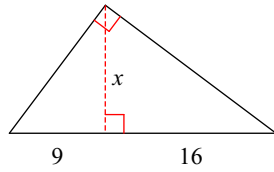


26)

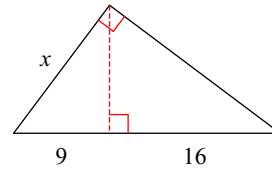


Find the missing length indicated.

27)

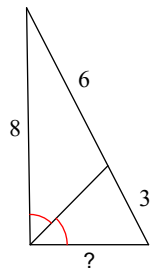


28)

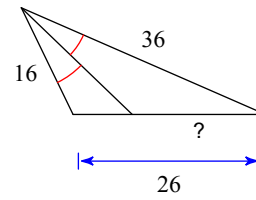


Find the missing length indicated.

29)

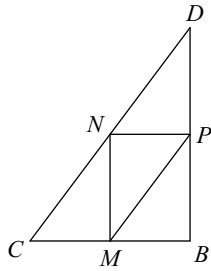


30)



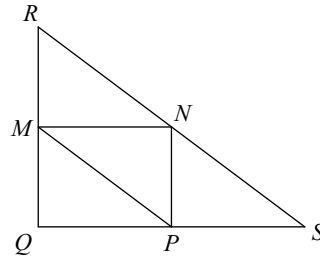
In each triangle, M, N, and P are the midpoints of the sides. Name a segment parallel to the one given.

31)



$\overline{MP} \parallel \underline{\hspace{1cm}}$

32)



$\overline{QR} \parallel \underline{\hspace{1cm}}$

33) List 4 ways to prove that 2 triangles are similar.

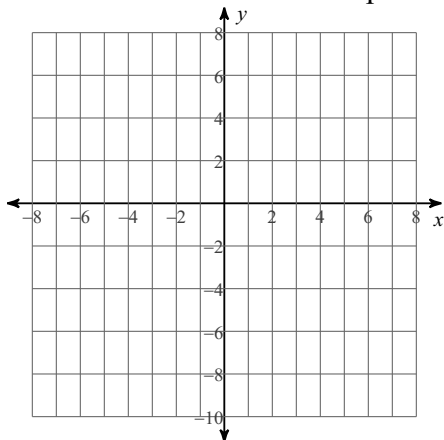
- 1.
- 2.
- 3.
- 4.

34) List the properties of dilation.

- 1.
- 2.
- 3.
- 4.

35) a. A(2, -9) B(6,5) and C(8,-5) Plot the points and connect them to create  $\triangle ABC$ .

b. Find the midpoints of each segment and connect them to create the midsegment triangle. List the coordinates of the three midpoints below.



**Draw an example of the following. Include all necessary markings. Then state which point of concurrency is formed by making all three and state one property about that point.**

36) Altitude  
Draw:

37) Perpendicular Bisector  
Draw:

Point of Concurrency:

Point of Concurrency:

Property:

Property:

38) Angle Bisector  
Draw:

39) Median  
Draw:

Point of Concurrency:

Point of Concurrency:

Property:

Property:

40) A telephone booth that is 8 ft tall casts a shadow that is 4 ft long. Find the height of a lawn ornament that casts a 2 ft shadow.

41) A 6.5 ft tall car standing next to an adult elephant casts a 33.2 ft shadow. If the adult elephant casts a shadow that is 51.5 ft long then how tall is it?