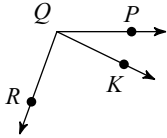


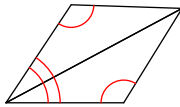
SM2-A HW #9-8 (Unit 9 Test Preview)

- 1) $m\angle KQR = 11x - 4$, $m\angle PQR = 110^\circ$,
and $m\angle POK = 3x + 2$. Find x .

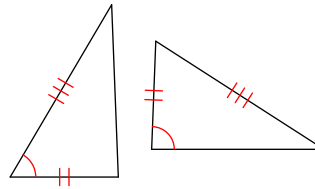


State if the two triangles are congruent. If they are, state how you know.

2)



3)

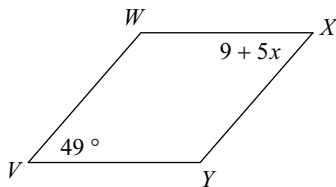


Find the midpoint of the line segment with the given endpoints.

- 4) $(0, 10)$, $(8, -4)$

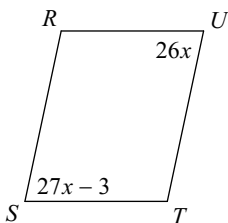
Solve for x . Each figure is a parallelogram.

5)



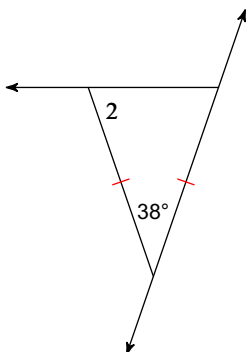
Find the measurement indicated in each parallelogram.

- 6) Find $m\angle R$



Find the value of x .

- 7) $m\angle 2 = x + 78$

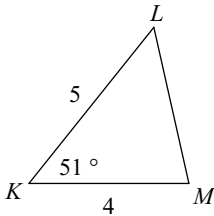
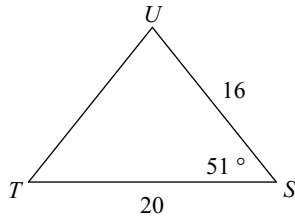


Find the distance between each pair of points.

8) $(-1, 6), (5, 4)$

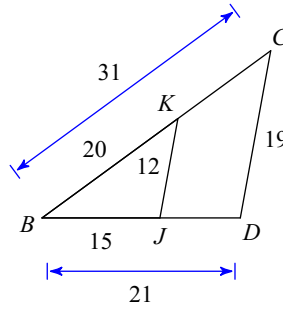
- a) Use calculations to determine if the triangles in each pair are similar.
 b) If they are similar, state the triangle similarity theorem that justifies your conclusion.
 c) If they are similar, complete the similarity statement.

9)



$\triangle STU \sim$ _____

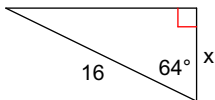
10)



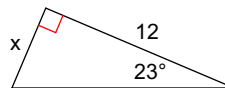
$\triangle BCD \sim$ _____

- a) Write the equation you started with to find the missing side.
 b) Calculate the length of the missing side to the nearest tenth.

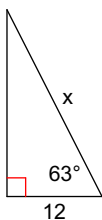
11)



12)

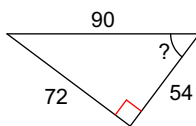


13)

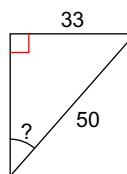


Find the measure of the indicated angle to the nearest degree.

14)

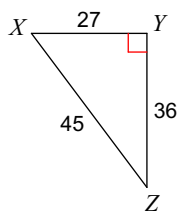


15)

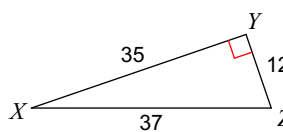


Find the value of each trigonometric ratio.

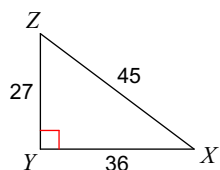
16) $\cos Z$



17) $\tan Z$

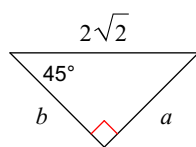


18) $\sin Z$

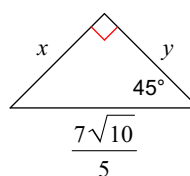


Find the missing side lengths. Leave your answers as radicals in simplest form.

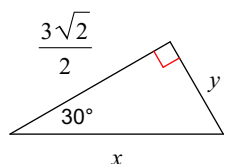
19)



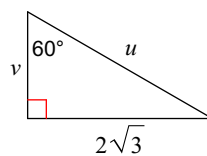
20)



21)

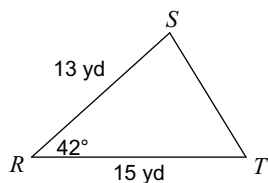


22)

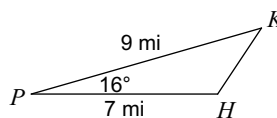


Find the area of each triangle to the nearest tenth.

23)

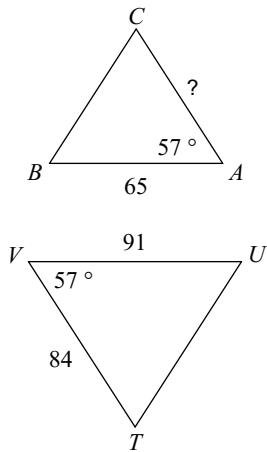


24)



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

25) $\triangle VUT \sim \triangle ABC$



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

26)

