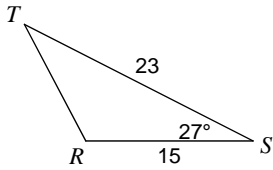
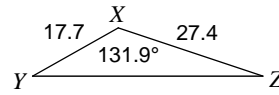
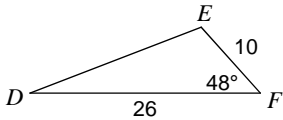
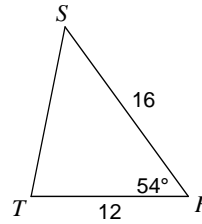
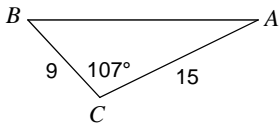
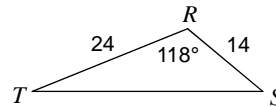
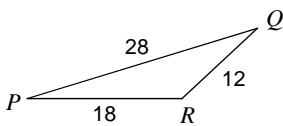
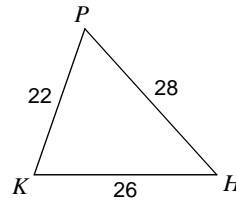
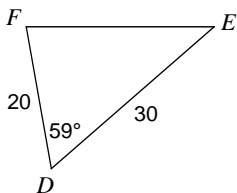
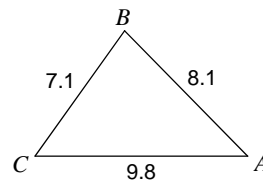


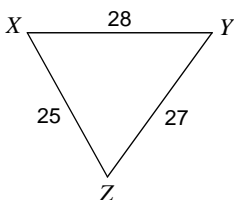
## The Law of Cosines

Find each measurement indicated. Round your answers to the nearest tenth.

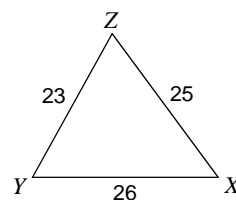
1) Find  $RT$ 2) Find  $YZ$ 3) Find  $DE$ 4) Find  $ST$ 5) Find  $m\angle A$ 6) Find  $m\angle S$ 7) Find  $m\angle R$ 8) Find  $m\angle H$ 9) Find  $m\angle E$ 10) Find  $m\angle A$ 

Solve each triangle. Round your answers to the nearest tenth.

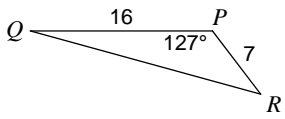
11)



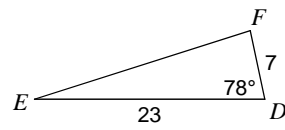
12)



13)



14)



15) In  $\triangle STR$ ,  $m\angle S = 117.8^\circ$ ,  $r = 20.4$ ,  $t = 22.1$

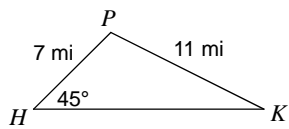
16) In  $\triangle RPQ$ ,  $q = 11$ ,  $p = 22$ ,  $m\angle R = 96^\circ$

17) In  $\triangle RST$ ,  $s = 13$ ,  $r = 30$ ,  $t = 20$

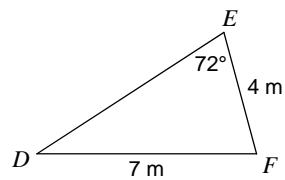
18) In  $\triangle ABC$ ,  $a = 19.8$ ,  $b = 19.1$ ,  $c = 16.7$

**Find the area of each triangle to the nearest tenth.**

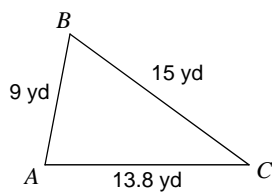
19)



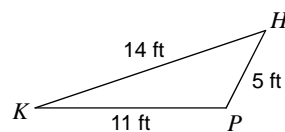
20)



21)



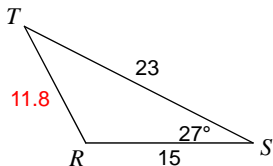
22)



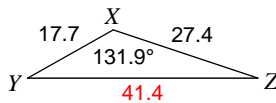
# The Law of Cosines

**Find each measurement indicated. Round your answers to the nearest tenth.**

1) Find  $RT$



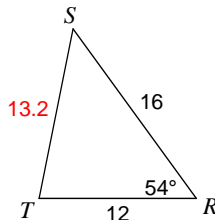
2) Find  $YZ$



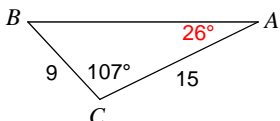
3) Find  $DE$



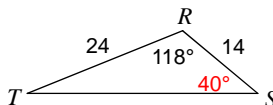
4) Find  $ST$



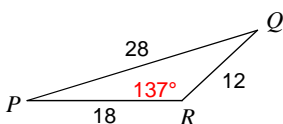
5) Find  $m\angle A$



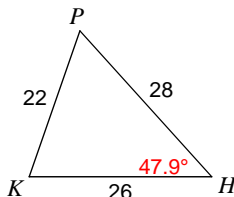
6) Find  $m\angle S$



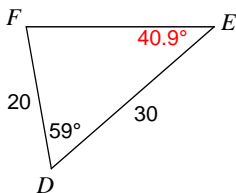
7) Find  $m\angle R$



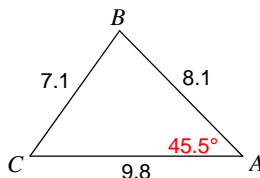
8) Find  $m\angle H$



9) Find  $m\angle E$

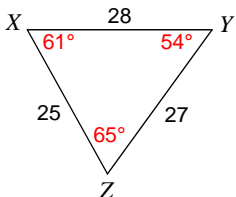


10) Find  $m\angle A$

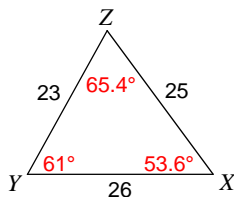


**Solve each triangle. Round your answers to the nearest tenth.**

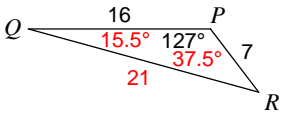
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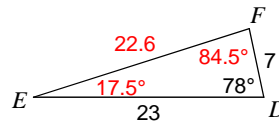
12)



13)



14)

15) In  $\triangle STR$ ,  $m\angle S = 117.8^\circ$ ,  $r = 20.4$ ,  $t = 22.1$ 

$$m\angle T = 32.5^\circ, m\angle R = 29.7^\circ, s = 36.4$$

16) In  $\triangle RPQ$ ,  $q = 11$ ,  $p = 22$ ,  $m\angle R = 96^\circ$ 

$$m\angle P = 58.7^\circ, m\angle Q = 25.3^\circ, r = 25.6$$

17) In  $\triangle RST$ ,  $s = 13$ ,  $r = 30$ ,  $t = 20$ 

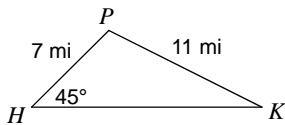
$$m\angle R = 129.6^\circ, m\angle S = 19.5^\circ, m\angle T = 30.9^\circ$$

18) In  $\triangle ABC$ ,  $a = 19.8$ ,  $b = 19.1$ ,  $c = 16.7$ 

$$m\angle A = 66.8^\circ, m\angle B = 62.4^\circ, m\angle C = 50.8^\circ$$

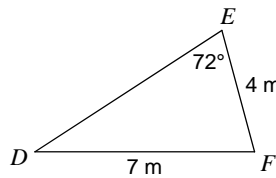
Find the area of each triangle to the nearest tenth.

19)



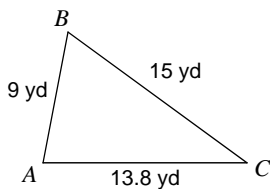
$$36.6 \text{ mi}^2$$

20)



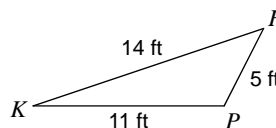
$$13.5 \text{ m}^2$$

21)



$$61 \text{ yd}^2$$

22)



$$24.5 \text{ ft}^2$$