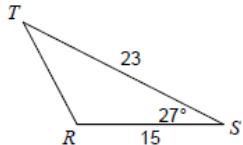


Law of Cosines ... Set 1

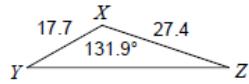
The Law of Cosines

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

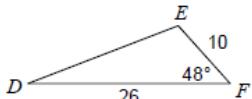
- 1) Find RT



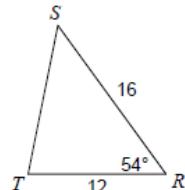
- 2) Find YZ



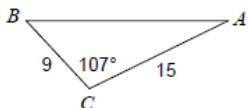
- 3) Find DE



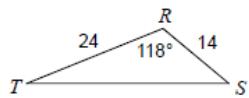
- 4) Find ST



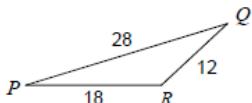
- 5) Find $m\angle A$



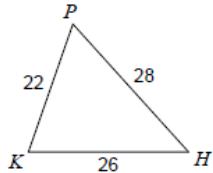
- 6) Find $m\angle S$



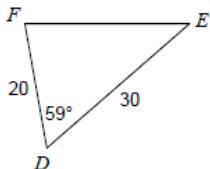
- 7) Find $m\angle R$



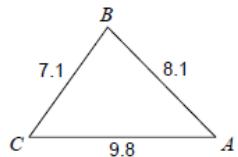
- 8) Find $m\angle H$



- 9) Find $m\angle E$

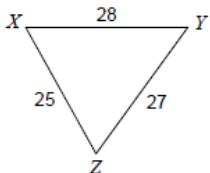


- 10) Find $m\angle A$

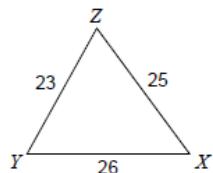


Solve each triangle. Round your answers to the nearest tenth.

- 11)



- 12)

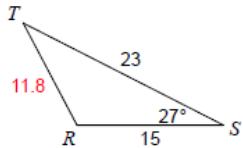


Law of Cosines ... Set 1

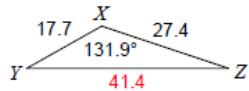
Answers

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

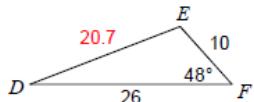
- 1) Find RT



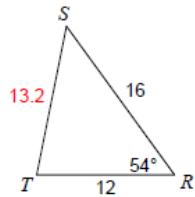
- 2) Find YZ



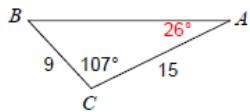
- 3) Find DE



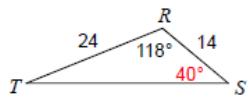
- 4) Find ST



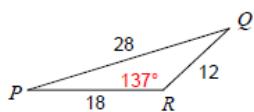
- 5) Find $m\angle A$



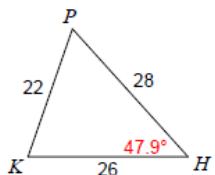
- 6) Find $m\angle S$



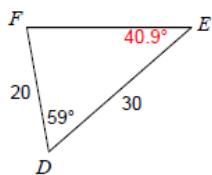
- 7) Find $m\angle R$



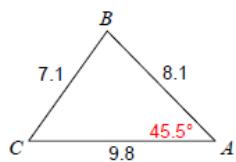
- 8) Find $m\angle H$



- 9) Find $m\angle E$

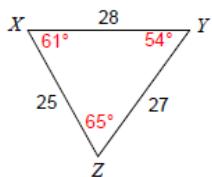


- 10) Find $m\angle A$

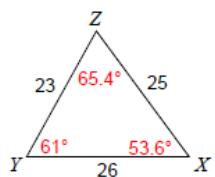


Solve each triangle. Round your answers to the nearest tenth.

- 11)

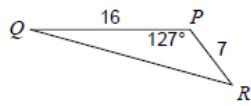


- 12)

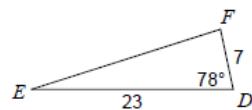


Law of Cosines ... Set 1

13)



14)



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

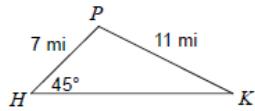
16) In $\triangle RPQ$, $q = 11$, $p = 22$, $m\angle R = 96^\circ$

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

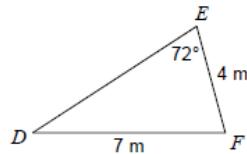
18) In $\triangle ABC$, $a = 19.8$, $b = 19.1$, $c = 16.7$

Find the area of each triangle to the nearest tenth.

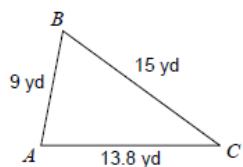
19)



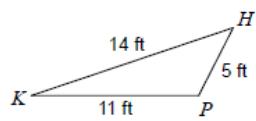
20)



21)



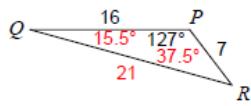
22)



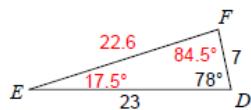
Law of Cosines ... Set 1

Answers

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

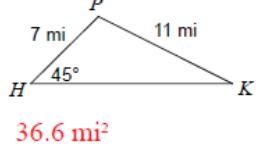
$$m\angle R = 129.6^\circ, m\angle S = 19.5^\circ, m\angle T = 30.9^\circ$$

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

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

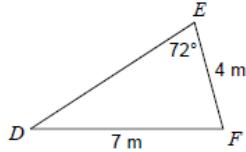
Find the area of each triangle to the nearest tenth.

19)



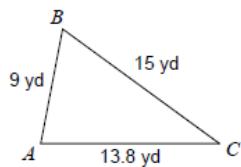
$$36.6 \text{ mi}^2$$

20)



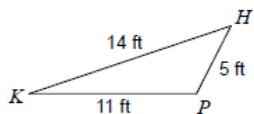
$$13.5 \text{ m}^2$$

21)



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

22)



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