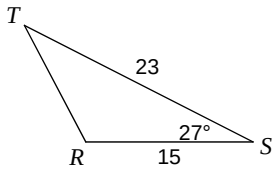
Candle Center - Infinite Precalculus Name_____

The Law of Cosines

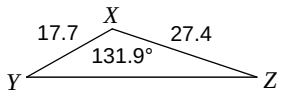
Date_____ Period____

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

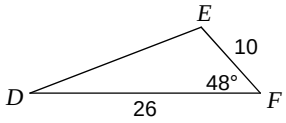
1) Find RT



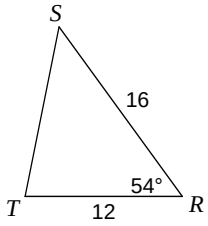
2) Find YZ



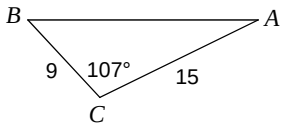
3) Find DE



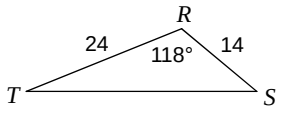
4) Find ST



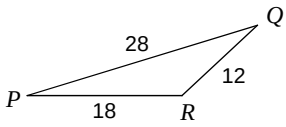
5) Find $m\angle A$



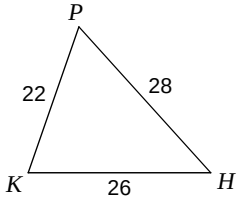
6) Find $m\angle S$



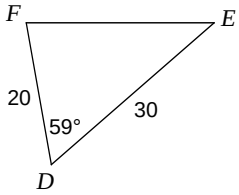
7) Find $m\angle R$



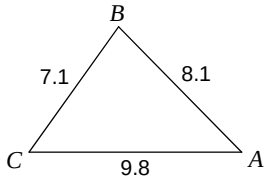
8) Find $m\angle H$



9) Find $m\angle E$

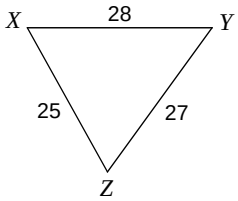


10) Find $m\angle A$

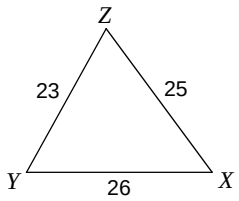


Solve each triangle. Round your answers to the nearest tenth.

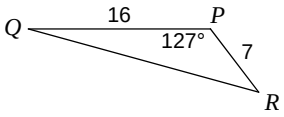
11)



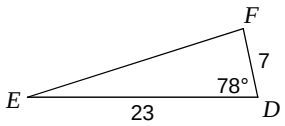
12)



13)



14)



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

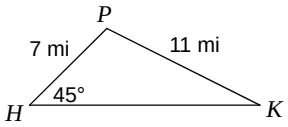
16) In $\triangle RPQ$, $q = 11$, $p = 22$, $m\angle R = 96°$

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

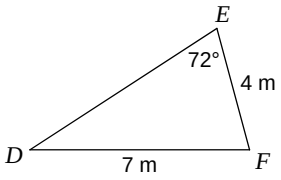
18) In $\triangle ABC$, $a = 19.8$, $b = 19.1$, $c = 16.7$

Find the area of each triangle to the nearest tenth.

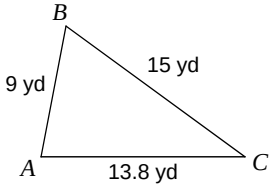
19)



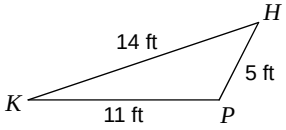
20)



21)



22)



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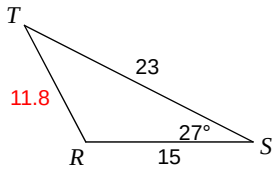
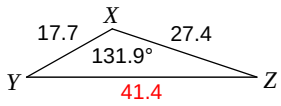
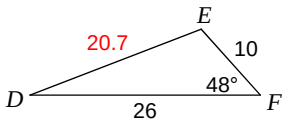


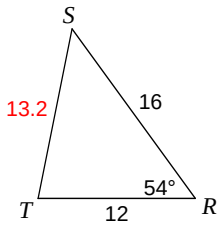
2) Find YZ



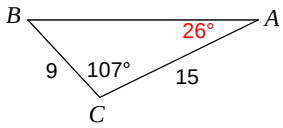
3) Find DE



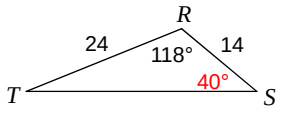
4) Find ST



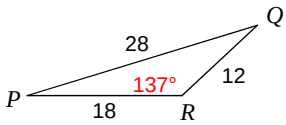
5) Find $m\angle A$



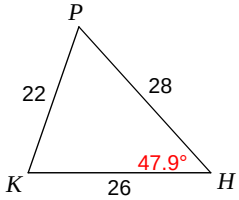
6) Find $m\angle S$



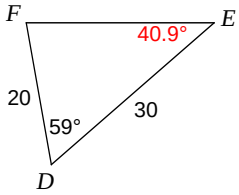
7) Find $m\angle R$



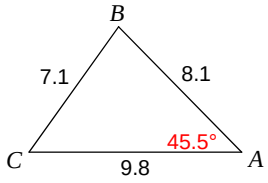
8) Find $m\angle H$



9) Find $m\angle E$

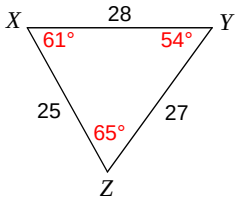


10) Find $m\angle A$

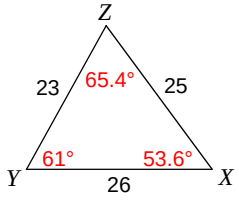


Solve each triangle. Round your answers to the nearest tenth.

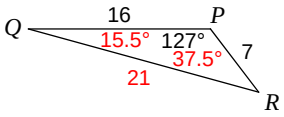
11)



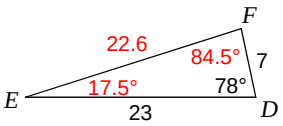
12)



13)



14)



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

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

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

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

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

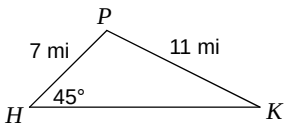
$m\angle R = 129.6°$, $m\angle S = 19.5°$, $m\angle T = 30.9°$

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

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

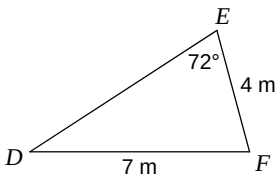
Find the area of each triangle to the nearest tenth.

19)



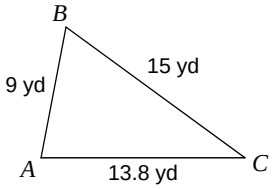
36.6 mi²

20)



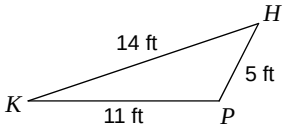
13.5 m²

21)



61 yd²

22)



24.5 ft²