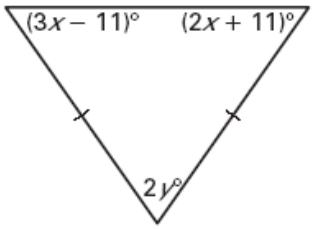
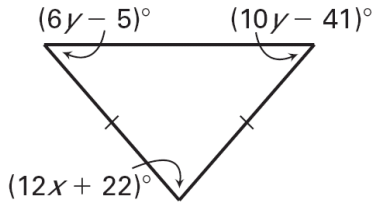
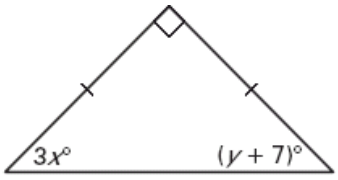
Geometry H
Section 4.7 Extra Practice

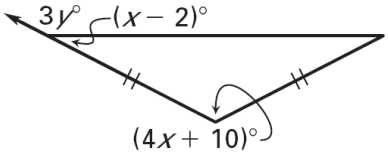
Name : _____
Date : _____ Period : ___

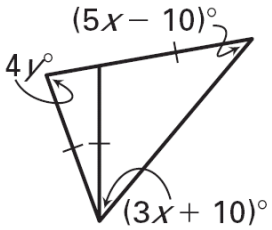
Find the values of x and y.

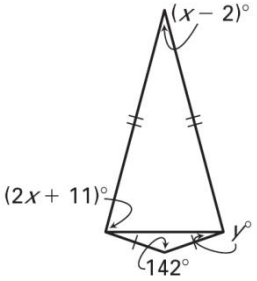
1. 

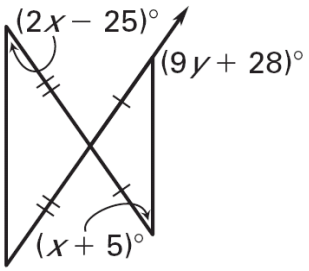
2. 

3. 

4. 

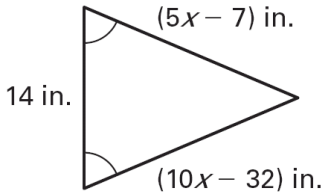
5. 

6. 

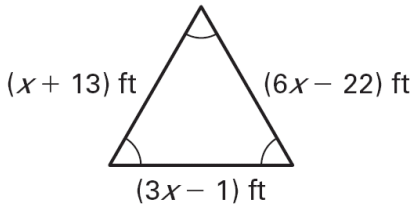
7. 

Find the perimeter of the triangle.

8.

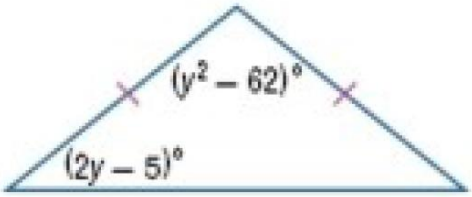


9.

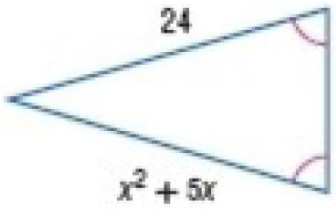


Given the triangles below for #10 –11, please solve for the indicated variable. Be sure to check for extraneous solutions!

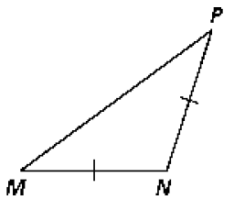
10.



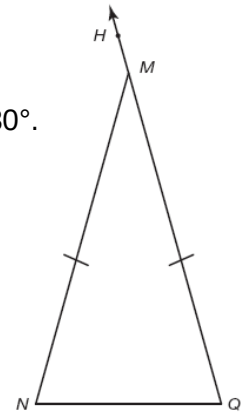
11.



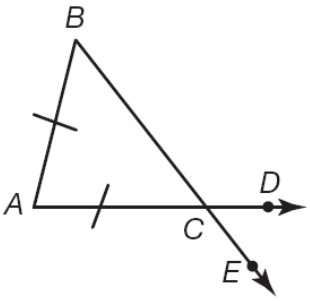
12. ΔMNP is an isosceles triangle with $\overline{MN} \cong \overline{PN}$. The $m\angle N$ is three times the $m\angle P$. What is the measure of each angle?



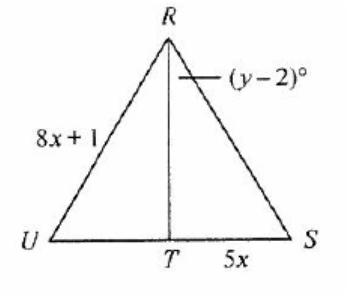
13. In the isosceles triangle shown below, the measure of the exterior angle $\angle HMN$ is 130°. Please find the $m\angle Q$.



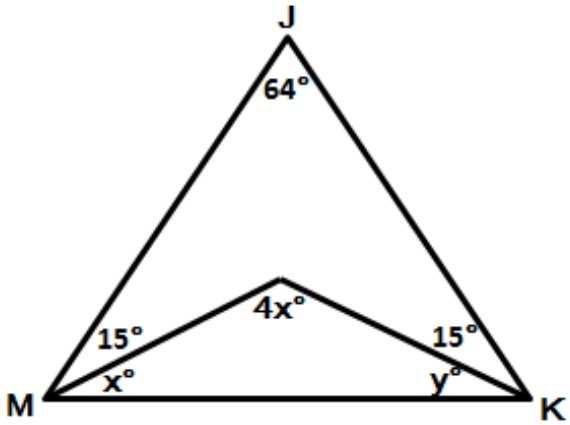
14. In the isosceles triangle show below, $m\angle BAC = 94°$. What is the measure of $\angle DCE$?



15. ΔRSU is an equilateral triangle. $\overline{RT}$ bisects $\angle URS$ and $\overline{US}$. Find the values of x and y.



16. Given the diagram below, please solve for x and y.



Answer Key :

1) $x = 22,\ y = 35$

2) $x = 5,\ y = 9$

3) $x = 15,\ y = 38$

4) $x = 29,\ y = 51$

5) $x = 10,\ y = 20$

6) $x = 32,\ y = 19$

7) $x = 30,\ y = 13$

8) $x = 5,\ P = 50\,in$

9) $x = 7,\ P = 60\,ft$

10) $y = 14$

11) $x = -8,\ x = 3$

12) $m\angle P = 36°,\ m\angle M = 36°,\ m\angle N = 108°$

13) $m\angle Q = 65°$

14) $m\angle DCE = 43°$

15) $x = \frac{1}{2},\ y = 32$

16) $x = 23.5,\ y = 62.5$