

**4-2 Classifying Triangles**

Classify each triangle by its angle measures.

5.  $\triangle ACD$

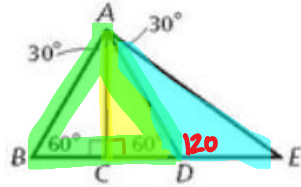
right

6.  $\triangle ABD$

equiangular

7.  $\triangle ADE$

obtuse



Classify each triangle by its side lengths.

8.  $\triangle PQR$

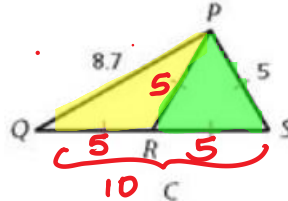
isosceles

9.  $\triangle PRS$

equilateral

10.  $\triangle PQS$

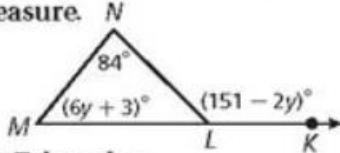
scalene



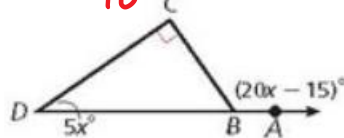
**4-3 Angle Relationships in Triangles**

Find each angle measure.

11.  $m\angle M$



12.  $m\angle ABC$



**4-4 Congruent Triangles**

Given:  $\triangle JKL \cong \triangle DEF$ . Identify the congruent corresponding parts.

13.  $\overline{KL} \cong \overline{EF}$

14.  $\overline{DF} \cong \overline{JL}$

15.  $\angle K \cong \angle E$

16.  $\angle F \cong \angle L$

(11)  $84 + 6y + 3 = 151 - 2y$   
 $6y + 87 = 151 - 2y$   
 $4y = 64$   
 $y = 14$   
 $\angle M = 6(14) + 3 = \boxed{87^\circ}$

(12)  $5x + 90 = 20x - 15$   
 $105 = 15x$   
 $x = 7$   
 $\angle ABC = 20(7) - 15 = \boxed{125^\circ}$