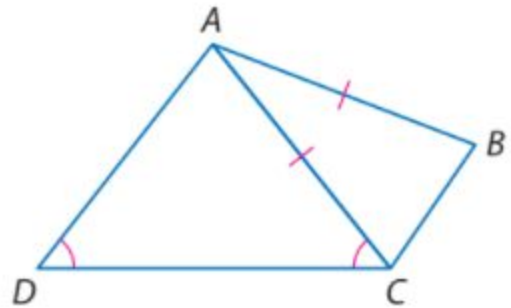


<p>Isosceles Triangle Theorem</p>	<p>If two sides of a triangle are congruent, then the angles opposite those sides are congruent.</p>	<p>A triangle with vertices labeled A, B, and C. Sides AC and BC are marked with single tick marks. Angles at vertices A and B are labeled 1 and 2 respectively.</p>
<p>Converse of Isosceles Triangle Theorem</p>	<p>If two angles of a triangle are congruent, then the sides opposite to those angles are congruent.</p>	<p>A triangle with vertices labeled D, E, and F. Angles at vertices D and F are labeled 1 and 2 respectively.</p>

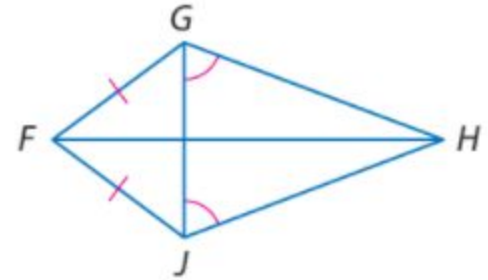
1. Use the diagram below to answer the following questions:
  - a. Name two unmarked congruent angles.



- b. Name two unmarked congruent sides.

4.6 Isosceles and Equilateral Triangles

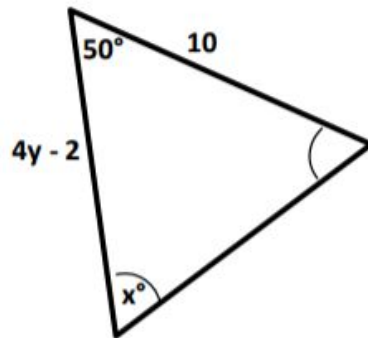
2. Use the diagram below to answer the following questions:  
 a. Name two unmarked congruent angles.



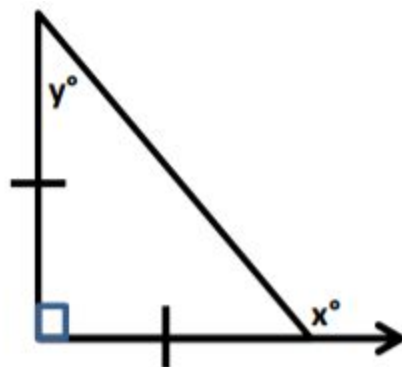
- b. Name two unmarked congruent sides.

3. Solve for  $x$  and  $y$

- a.

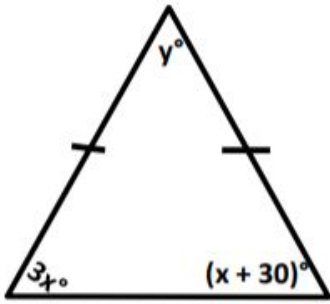


- b.

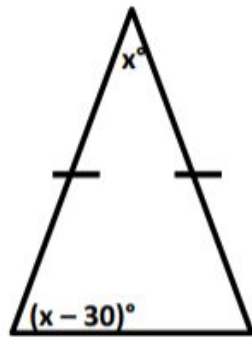


Geometry CP  
4.6 Isosceles and Equilateral Triangles

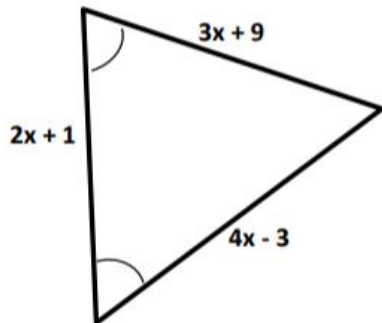
c.

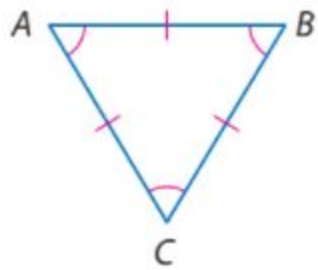
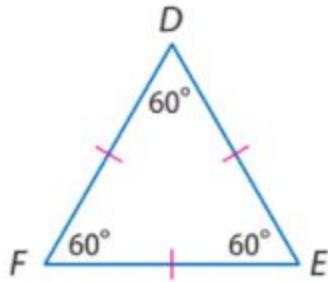


d.

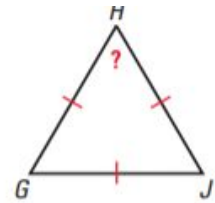
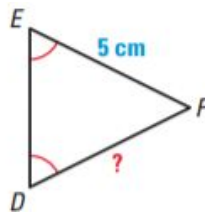
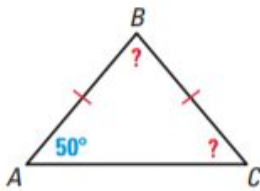


4. Solve for  $x$

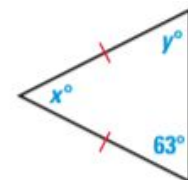
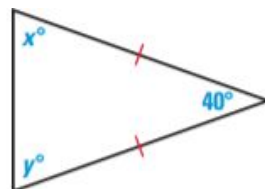
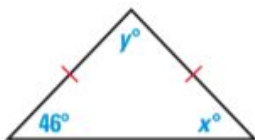


Equilateral Triangle Corollaries		
	A triangle is equilateral if and only if it is equiangular.	
	Each angle of an equilateral triangle is $60^\circ$	

5. Find the unknown measures:



6. Solve for  $x$  and  $y$ :



Geometry CP  
4.6 Isosceles and Equilateral Triangles

