Chapter 3 Practice Quiz

Directions: The Chapter 3 Summary Begins on <u>Page 253</u>. Use this as a study guide to help you complete this practice quiz. As you go through, add information, write page numbers, make ordered lists, etc.

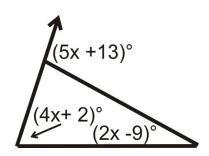
Know how to use the following theorems:

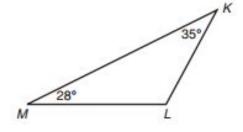
Triangle Sum Theorem Exterior Angle Theorem Triangle Inequality Theorem

45°-45°-90° Triangle Theorem 30°-60°-90° Triangle Theorem

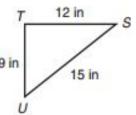
- 1) Which of these statements is true about the sum of the measures of the interior angles of a triangle?
- A It equals 90°, because it's possible to arrange three copies of the same triangle so that the sum of its three angles forms a right angle.
- B It equals 180°, because it's possible to arrange three copies of the same triangle so that the sum of its three angles forms a right angle.
- C It equals 90°, because it's possible to arrange three copies of the same triangle so that the sum of its three angles forms a line.
- D It equals 180°, because it's possible to arrange three copies of the same triangle so that the sum of its three angles forms a line.
- 2) Solve for x.

3) List the sides of triangle KML in order from least to greatest.

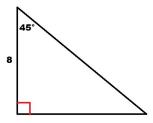




4) List the angles of triangle STU in order from least to greatest.



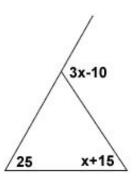
5) Find the hypotenuse of the given 45-45-90 right triangle.



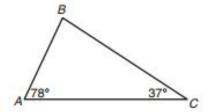
6) State if the three numbers can be sides of the lengths of a right triangle.

17, 30, 12

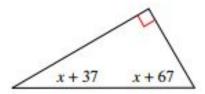
7) Solve for *x* using the Triangle Exterior Angle Theorem.



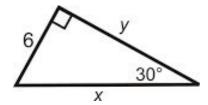
8) Find the measure of the missing angle.



9) Find the value of x.



10) Use the properties of special right triangles to find the values of *x* and *y*.



11) Use the properties of special right triangles to find the find the values of a and b.

