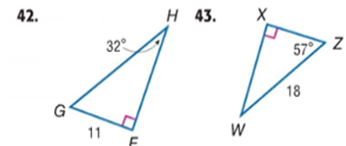


Solving a Right Triangle

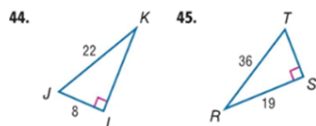
When solving a right triangle you will be finding all of the unknown sides and angles.

This can be accomplished using Trig ratios, the pythagorean theorem, and the triangle sum theorem.

If you have a side and angle then you will need to first use a trig ratio to solve for a second side, then use the pythagorean theorem to solve for the third side. Lastly use the triangle sum theorem to find the remaining acute angle.



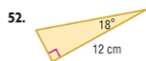
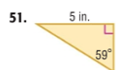
If you know two sides, start by finding the third side with the pythagorean theorem, then use a trig ratio to solve for an acute angle, lastly, use the triangle sum theorem to find the remaining acute angle.



Hannah is making a pennant for each of the 18 girls on her basketball team. What is the total length of orange felt that Hannah needs to buy in order to have enough for the borders of all of the pennants?



Find the perimeter and area of each triangle. Round to the nearest hundredth.



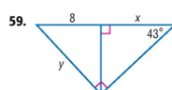
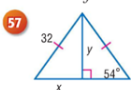
COORDINATE GEOMETRY Find the measure of each angle to the nearest tenth of a degree using the Distance Formula and an inverse trigonometric ratio.

47. $\angle K$ in right triangle JKL with vertices $J(-2, -3)$, $K(-7, -3)$, and $L(-2, 4)$

48. $\angle Y$ in right triangle XYZ with vertices $X(4, 1)$, $Y(-6, 3)$, and $Z(-2, 7)$

49. $\angle A$ in right triangle ABC with vertices $A(3, 1)$, $B(3, -3)$, and $C(8, -3)$

Find x and y . Round to the nearest tenth.



Homework: Worksheet, work odd problems only