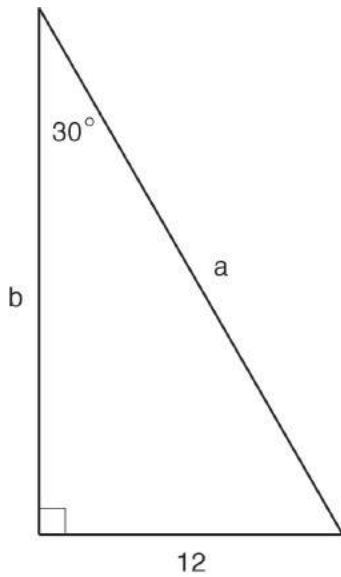


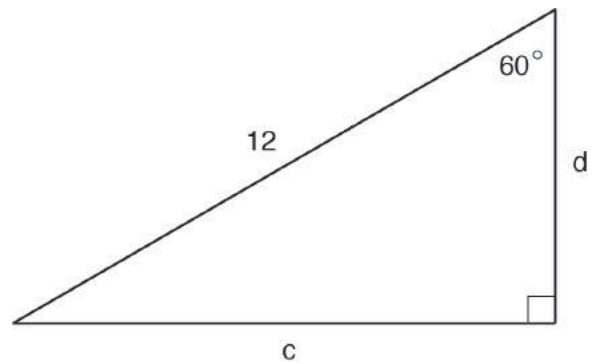
Solving Problems with Special Right Triangles

Use our class conjectures to determine the exact lengths. Assume all measurements are in centimeters unless otherwise stated. Figures are not drawn to scale.

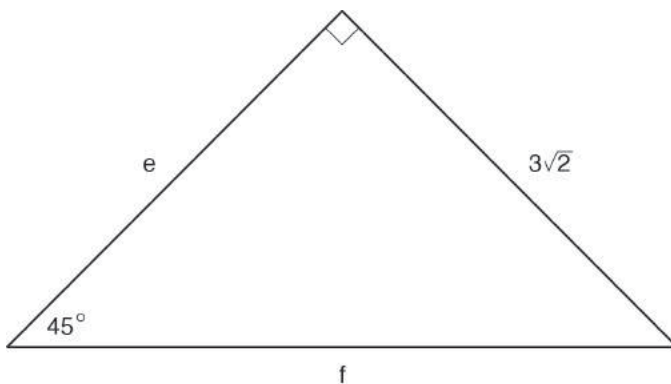
1. $a = \underline{\hspace{1cm}}$ $b = \underline{\hspace{1cm}}$



2. $c = \underline{\hspace{1cm}}$ $d = \underline{\hspace{1cm}}$

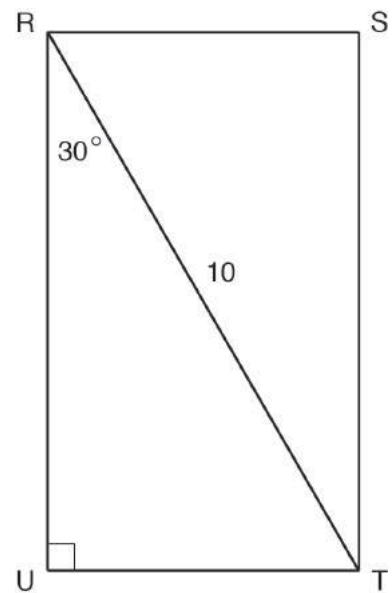


1. $e = \underline{\hspace{1cm}}$ $f = \underline{\hspace{1cm}}$

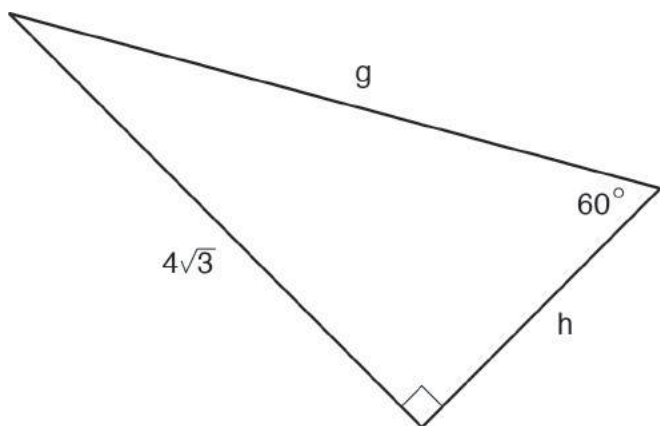


4. RSTU is a rectangle.

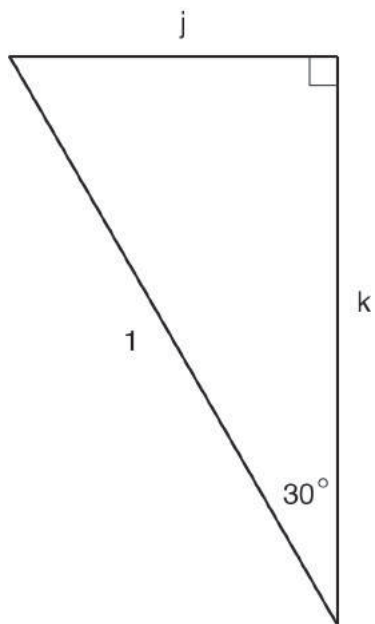
Perimeter of RSTU = _____



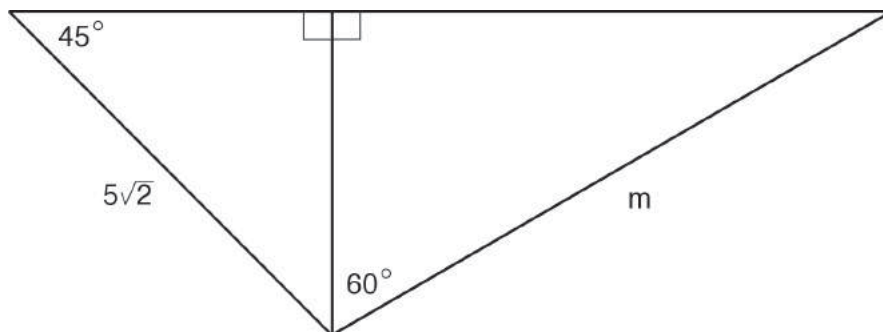
5. $g = \underline{\hspace{1cm}}$ $h = \underline{\hspace{1cm}}$



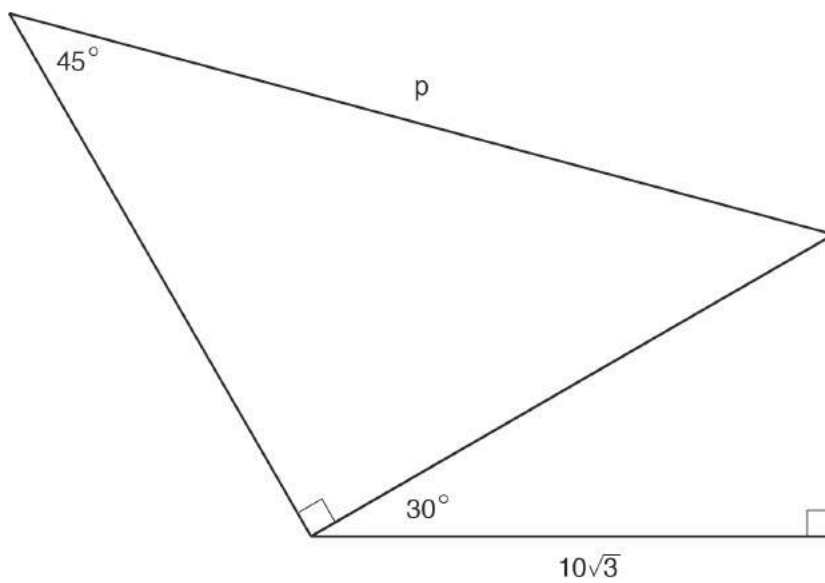
6. $j = \underline{\hspace{1cm}}$ $k = \underline{\hspace{1cm}}$



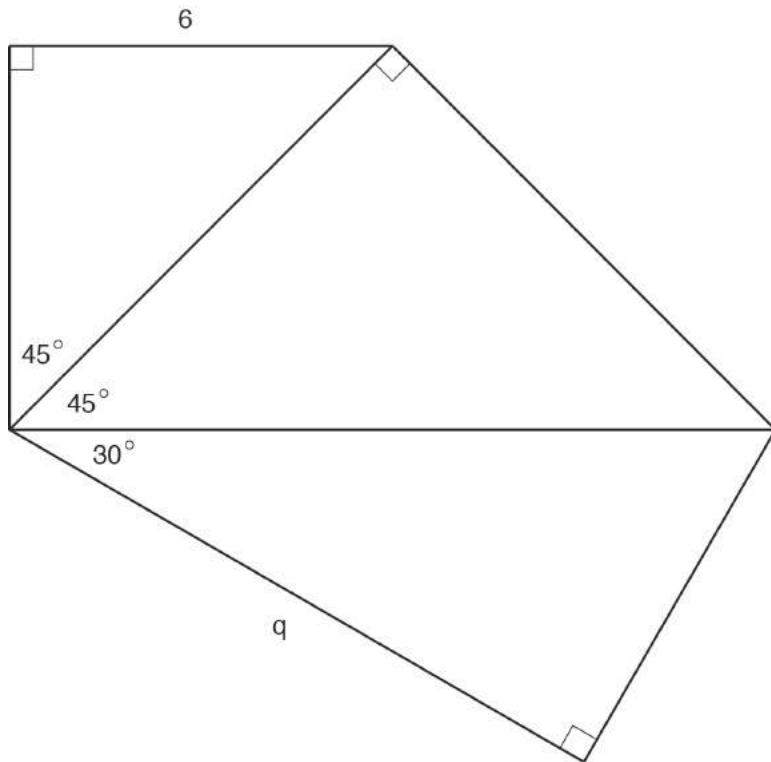
7. $m = \underline{\hspace{1cm}}$



8. $p = \underline{\hspace{1cm}}$



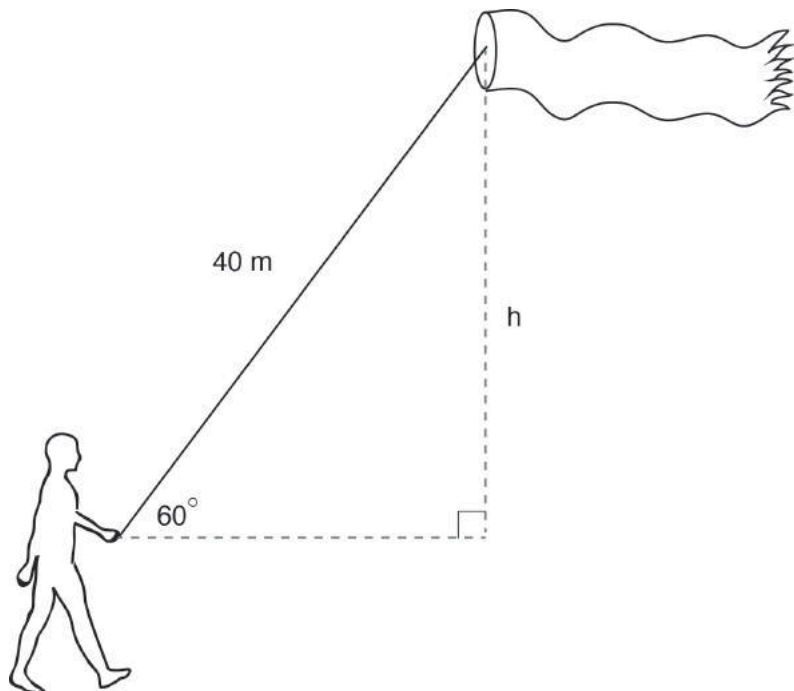
9. $q = \underline{\hspace{2cm}}$



10. A person is flying a kite using 40 meters of kite string as shown in the diagram.

What is the approximate measure of the height, h , of the kite?

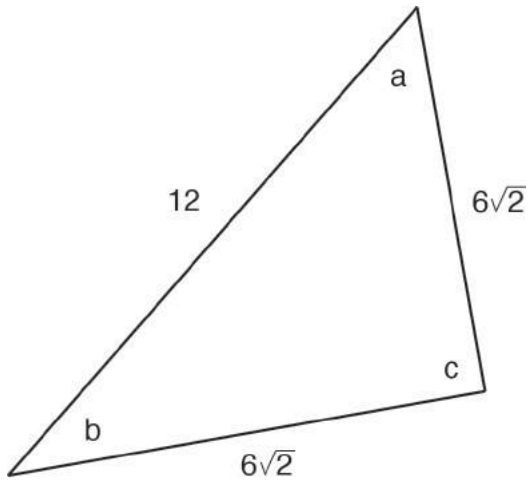
Use a calculator, but show your calculation below. Round the height to the nearest tenth of a meter.



Determine the angle measures for Problems 11 and 12.

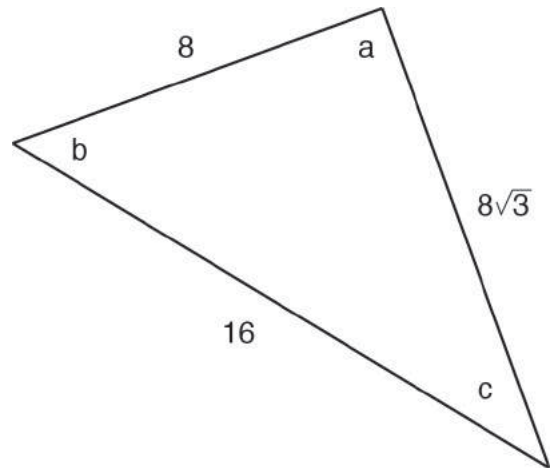
11.

$a = \underline{\hspace{1cm}}$ $b = \underline{\hspace{1cm}}$ $c = \underline{\hspace{1cm}}$



12.

$a = \underline{\hspace{1cm}}$ $b = \underline{\hspace{1cm}}$ $c = \underline{\hspace{1cm}}$



13. Sketch a 30-60-90 triangle at the right. Include the angle measures. The shorter leg measures $\frac{1}{2}$ cm in length. Show the lengths of all three sides of the triangle.

14. Sketch a 45-45-90 triangle at the right. Include the angle measures. The hypotenuse measures 1 cm in length. Show the lengths of all three sides of the triangle.

Use our class conjectures to determine the exact lengths. Assume all measurements are in centimeters unless otherwise stated. The figure is not drawn to scale.

15. $a = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$

