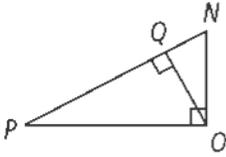


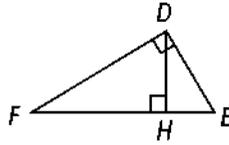
8.4 & 8.5 – Using Similar Right Triangles & Special Right Triangles

Write a similarity statement relating the three triangles in the diagram.

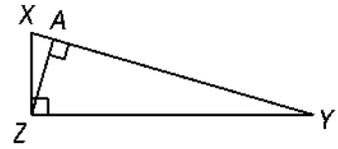
1)



2)

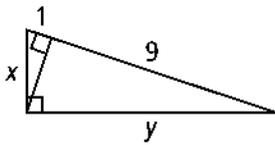


3)

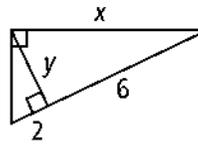


Solve for the value of the variables in each right triangle.

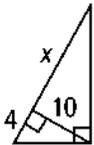
4)



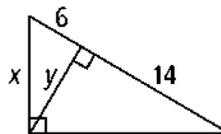
5)



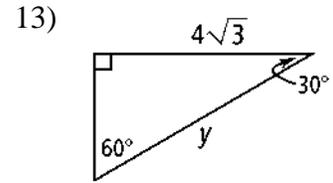
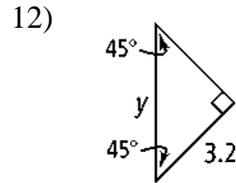
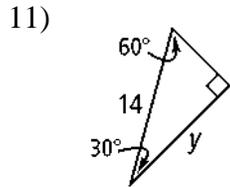
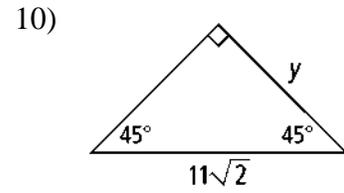
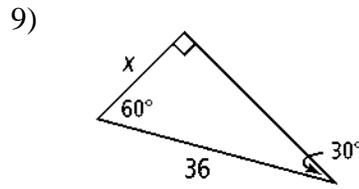
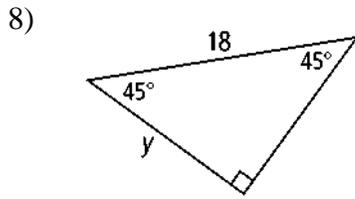
6)



7)



Find the value of each variable. If your answer is not an integer, express it in simplest radical form.



The side lengths of a triangle are given. Determine if the triangle is a 45° - 45° - 90° triangle, a 30° - 60° - 90° triangle, or neither.

14) $11, 11\sqrt{3}, 22$

15) $31, 31\sqrt{2}, 62$

16) A square has side length 95. What is the length of the diagonal of the square? Express your answer in simplest radical form.

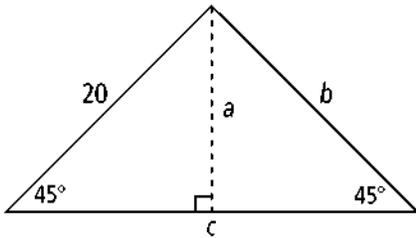
17) A professional baseball diamond is a square. The distance from base to base is 90 ft. To the nearest foot, how far does a catcher standing at home plate throw the ball across the diagonal of the square to second base?

- 18) A square tablecloth has a line of embroidered flowers along the diagonal. The tablecloth is 48 in. on each side. How long is the embroidery line? Round to the nearest inch.

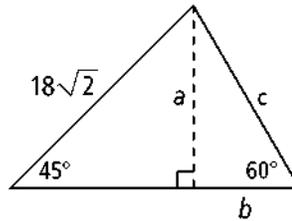
- 19) An equilateral triangle has height 26 cm. What is the length of each side of the triangle, to the nearest centimeter?

Find the value of each variable. If your answer is not an integer, express it in simplest radical form.

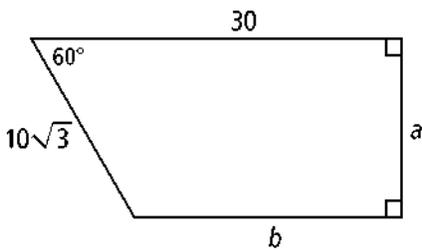
20)



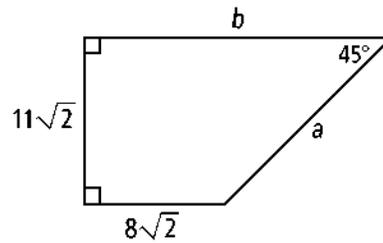
21)



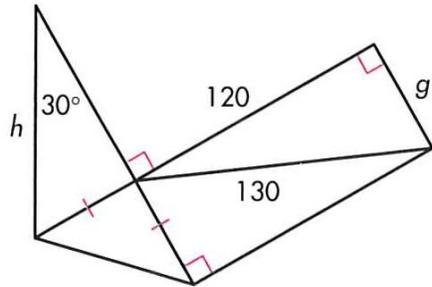
22)



23)



24)



25)

