$45° - 45° - 90°$ Triangle:

In a $45° - 45° - 90°$ Triangle, the hypotenuse is $\sqrt{2}$ times as long as each leg.
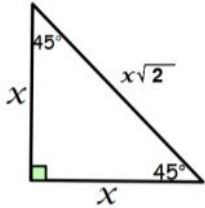
1. Find the missing sides:
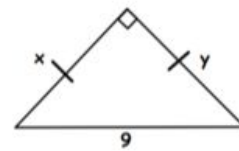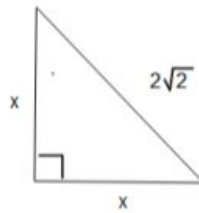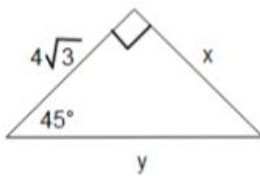
$30° - 60° - 90°$ Triangle:

In a $30° - 60° - 90°$ Triangle, the hypotenuse is 2 times longer than the shortest leg and the longest leg is $\sqrt{3}$ times as long as the shortest leg.

2. Find the missing sides:

$30°$

x

y

$2\sqrt{3}$

$5\sqrt{2}$

y

$60°$

x

$30°$

3

a

b

6

y

$60°$

x

8

x

y

$30°$

$45°$

z

$60°$

12

y

$60°$

x

3. Determine the length of the leg of a $45° - 45° - 90°$ triangle with a hypotenuse length of 11.

4. An equilateral triangle has an altitude length of 18 feet. Determine the length of a side of the triangle.