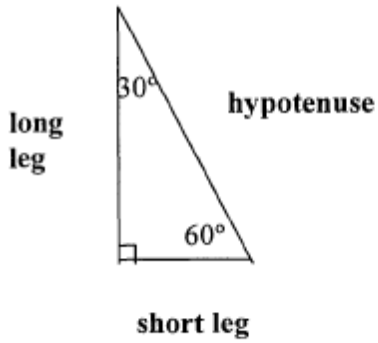


Geometry
Notes Lesson 5.8

Relationships in 30°-60°-90° Triangles:



Hypotenuse = twice the short leg

Long leg = short leg * $\sqrt{3}$

Find the missing sides of the triangles. Each triangle measures 30-60-90°. Leave answers in simplified radical form.

1. Triangle with 30° at top, 60° at bottom, short leg = 8, hypotenuse =

2. Triangle with 30° at bottom-left, 60° at top-right, hypotenuse = 12, short leg =

3. Triangle with 60° at top-right, 30° at bottom-left, long leg = $10\sqrt{3}$, short leg =

4. Triangle with 30° at top-left, 60° at bottom-right, long leg = $7\sqrt{3}$, short leg =

5. Triangle with 60° at top-left, 30° at bottom-right, long leg = 9, short leg =

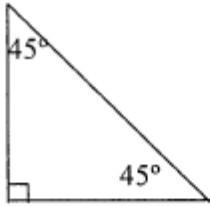
6. Triangle with 60° at top-right, 30° at bottom-left, short leg = 12, long leg =

7. Triangle with 30° at top, 60° at bottom, long leg = $8\sqrt{2}$, short leg =

8. Triangle with 60° at bottom-left, 30° at top-right, long leg = $12\sqrt{6}$, short leg =

9. Triangle with 60° at top-left, 30° at bottom-right, short leg = 5, long leg =

Relationships in 45°-45°-90° Triangles:



$$\text{Hypotenuse} = \text{leg} * \sqrt{2}$$

Find the missing sides of the triangles. Each triangle measures 45-45-90°. Leave answers in simplified radical form.

