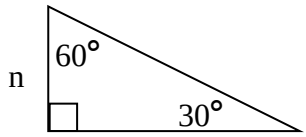
Special Right Triangles

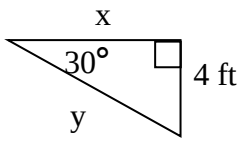
30° – 60° – 90° Δ



If the short leg (opposite the 30°) is _____ units, then the _____ _____ (opposite the 60°) is _____ units, and the _____ (opposite the right angle) is _____ units.

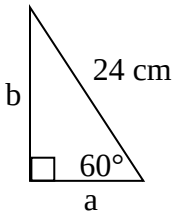
Find the measures of all sides of each triangle. Leave answers in exact form.

1.



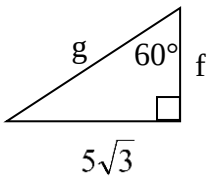
<u>30° – 60° – 90° Δ</u>
SL: n =
LL: $n\sqrt{3}$ =
Hyp: 2n =

2.

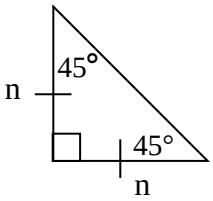


<u>30° – 60° – 90° Δ</u>
SL: n =
LL: $n\sqrt{3}$ =
Hyp: 2n =

3.



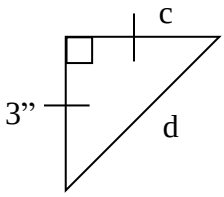
45° – 45° – 90° Δ



This triangle is called an _____ _____ triangle. Both legs are _____. If the legs are both *n* units, then the hypotenuse is _____ units by the _____ _____.

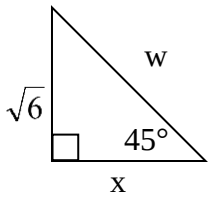
Find the measures of all sides of each triangle. Leave answers in exact form.

1.



<u>45° – 45° – 90° Δ</u>
Leg: n =
Hyp: $n\sqrt{2}$ =

2.



<u>45° – 45° – 90° Δ</u>
Leg: n =
Hyp: $n\sqrt{2}$ =

3.