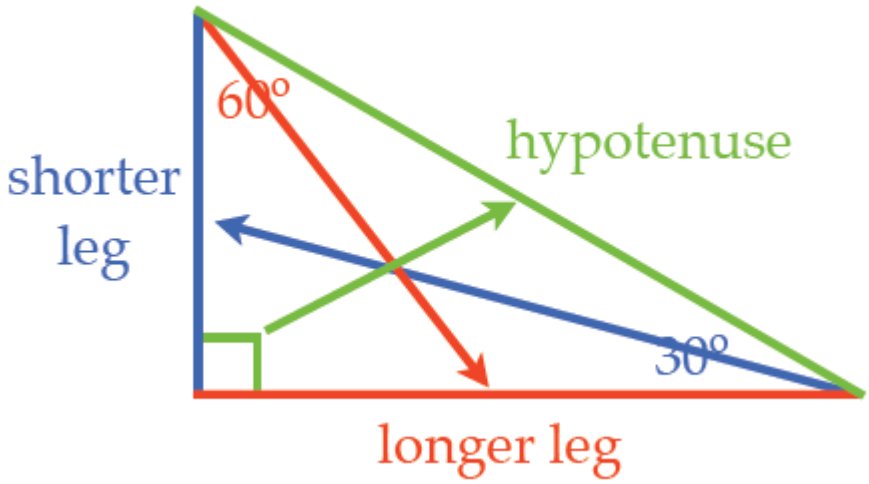
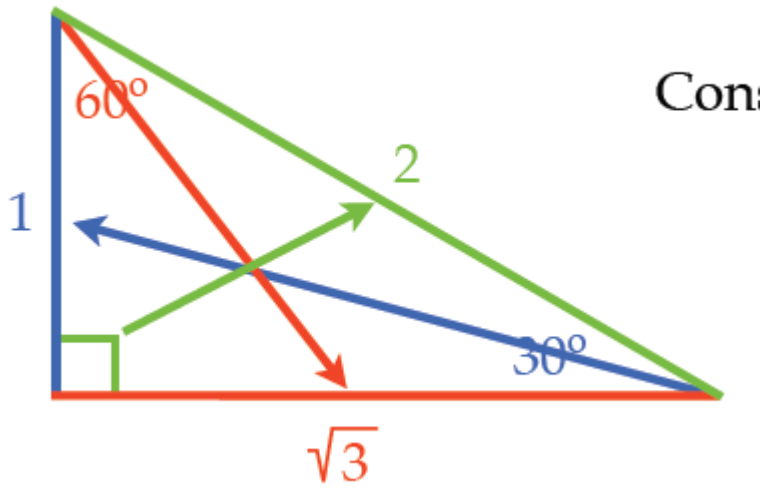
TOPIC 9-5: 30°-60°-90° TRIANGLES



The length of the hypotenuse is 2 times the length of the shorter leg.

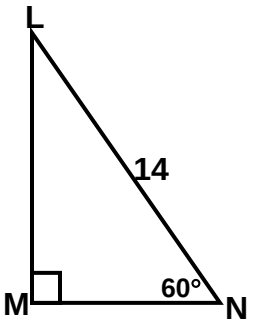
The length of the longer leg is √3 times the length of the shorter leg.



Let's watch an iTutoring video as to how we can use this constant ratio to solve for missing sides in this special right triaangle.

EXAMPLES **Find the values of the missing sides in each of the following 30°-60°-90° triangles.**

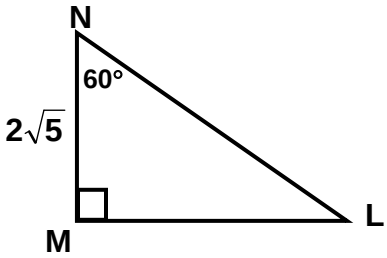
1)



LM = _____

MN = _____

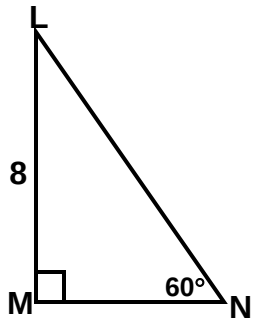
2)



LM = _____

LN = _____

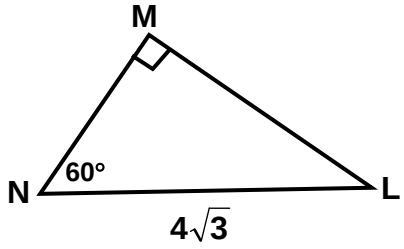
3)



MN = _____

LN = _____

4)



MN = _____

LM = _____

EXAMPLE 5 **The length of one side of an equilateral triangle is 11. Find the length of the altitude.**