

# Chapter 7 Jeopardy Game

By: Kyle, Yash, and Brahvan

Pythagorean Theorem	Special Right Triangles	Sine + Cosine	Geometric Mean Theorems
10	10	10	10
20	20	20	20
30	30	30	30
40	40	40	40
50	50	50	50

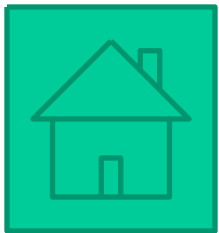
Which of these are a Pythagorean triples?

A) 3,4,5

B) 6,8,9

C) 13,14,16

A

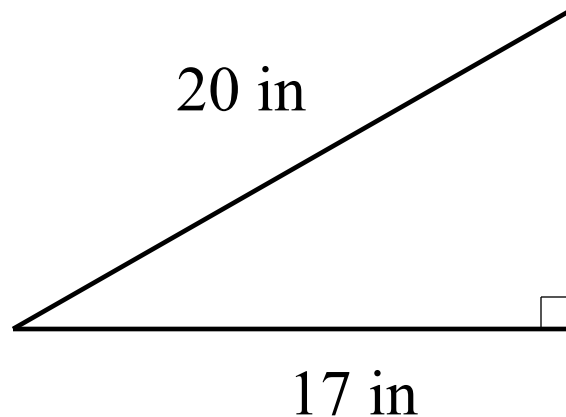


The legs of a right triangle are 14 in. And 17 in. long. How long is the hypotenuse?

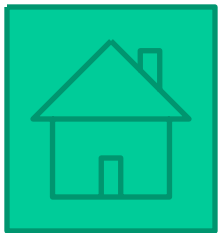
$$\sqrt{485}$$



If the hypotenuse of a right triangle is 20 in. long, and one leg is 17 in. long. How long is the other leg? Write answer in simplified radical form.

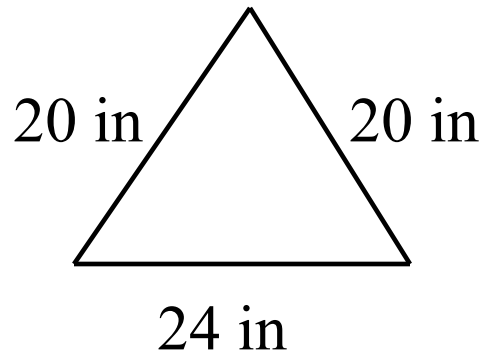


$$\sqrt{111}$$





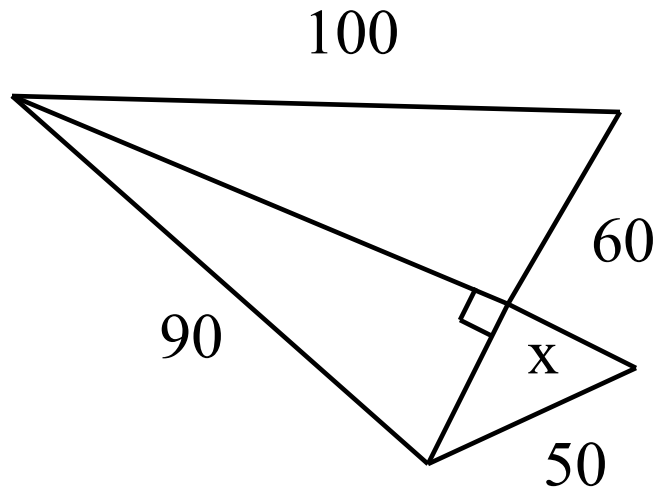
The lengths of the legs of an isosceles triangle are both 20 in and the base is 24 in. What is the area of the triangle?



192 in<sup>2</sup>



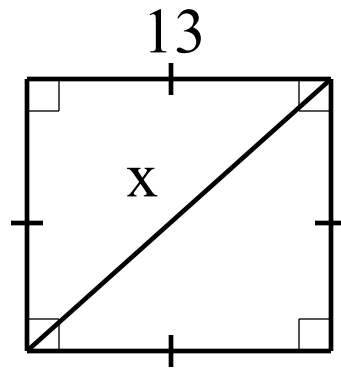
Find  $x$ . Write value in simplified radical form. 😊



$$x=10\sqrt{8}$$



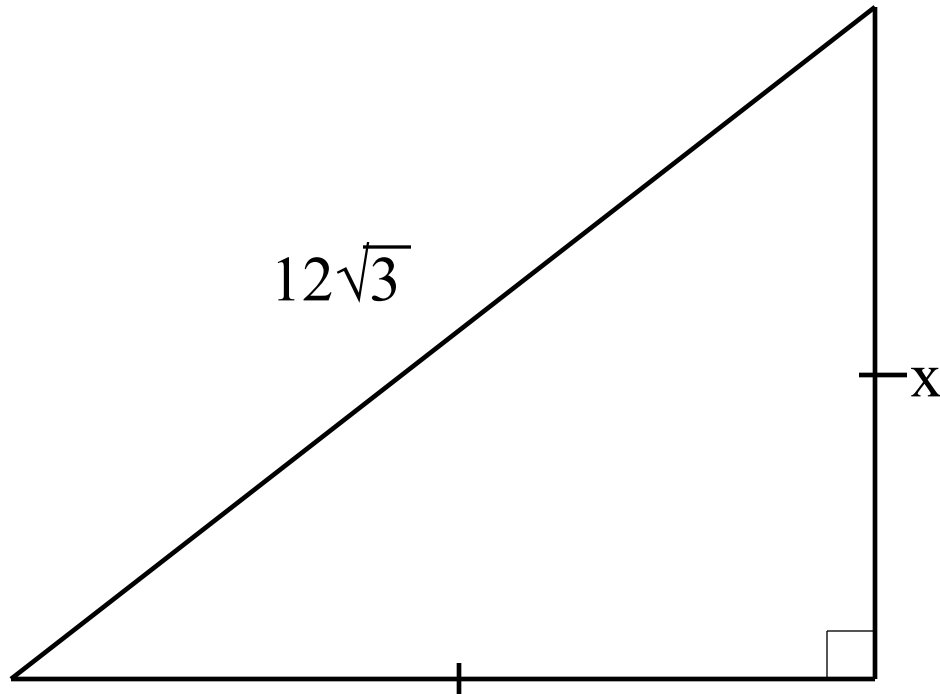
Find  $x$ . WRITE ANSWER IN SIMPLIFIED  
RADICAL FORM 😊



$$13\sqrt{2}$$



Find  $x$ . WRITE ANSWER IN  
SIMPLIFIED RADICAL FORM 😊



$$6\sqrt{6}$$



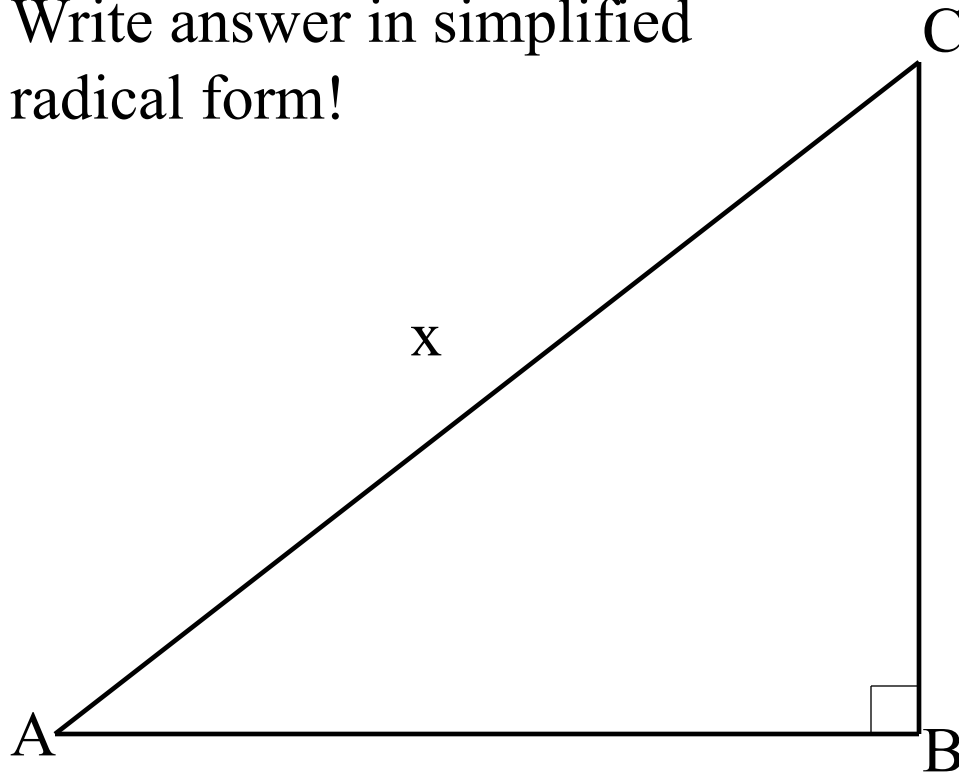


Find BC if...

a)  $x = 2\sqrt{3}$  and  $m \angle A = 45^\circ$

b)  $x = 2\sqrt{2}$  and  $m \angle A = 60^\circ$

Write answer in simplified radical form!

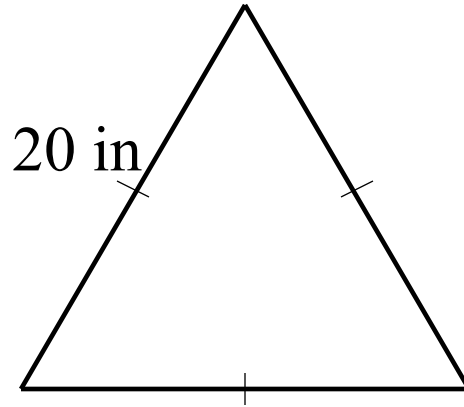


a)  $\sqrt{6}$

b)  $\sqrt{2}$



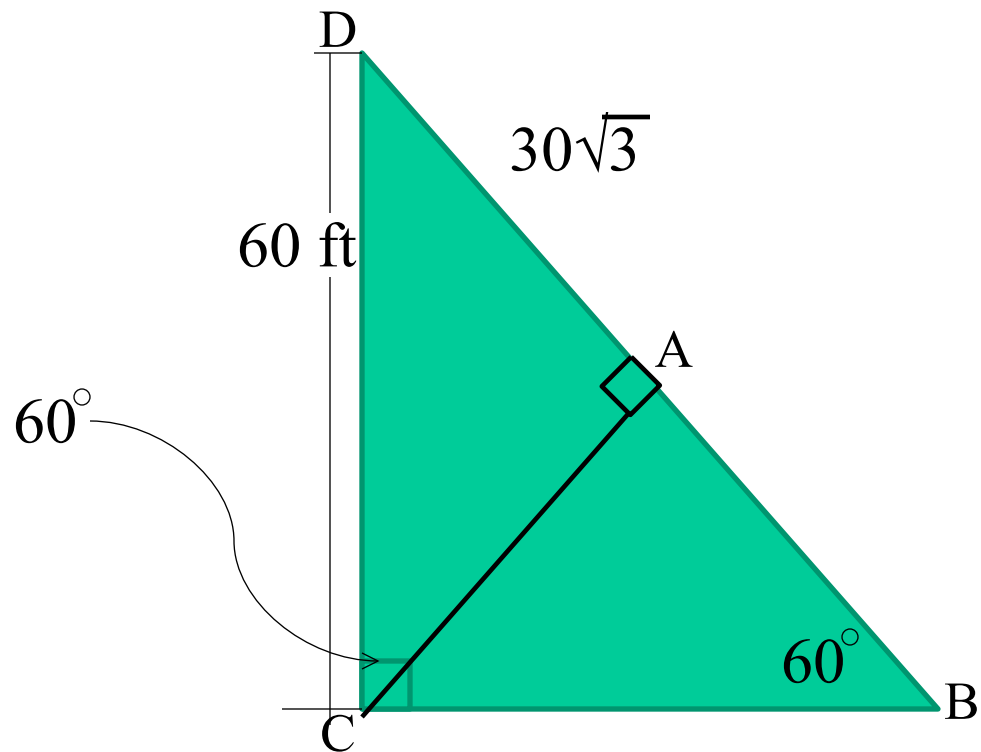
If an equilateral triangle has a side length of 20 in, find the height of the triangle.



$$10\sqrt{3}$$



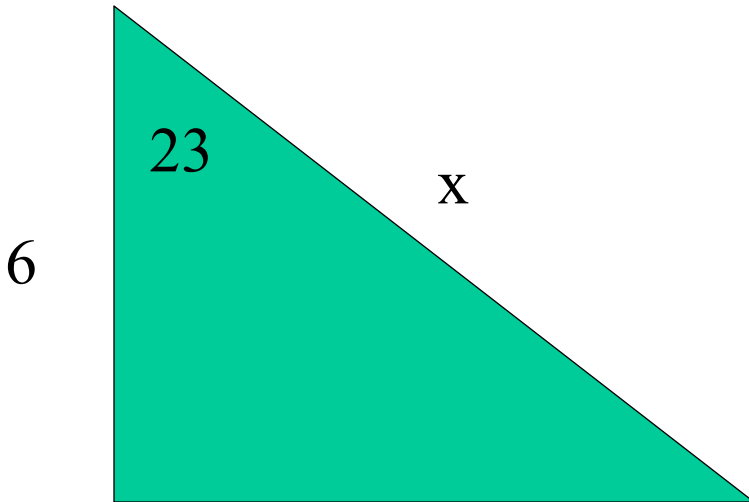
What is the length  
of CB?



$$20\sqrt{3}$$



Find  $x$



15.4





ABC is a right triangle with the side opposite angle A is 6 and angle A is 36 degrees. Find the hypotenuse.

10



What is the saying to remember sine, cosine,  
and tangent.

# SOH CAH TOA

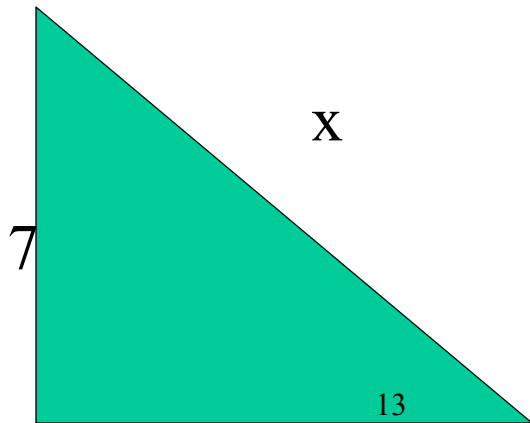


If the opposite side from angle A is 8 and the measure of angle a is 43 degrees, find the adjacent side.

8.6



Find  $x$

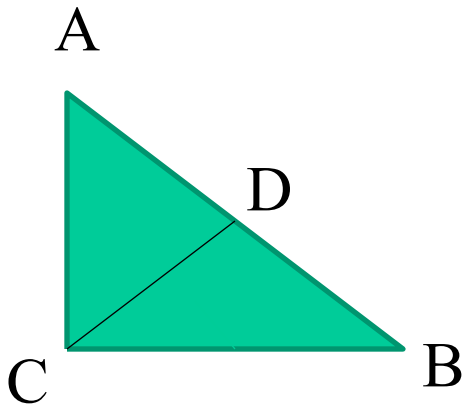


$$X=31.1$$





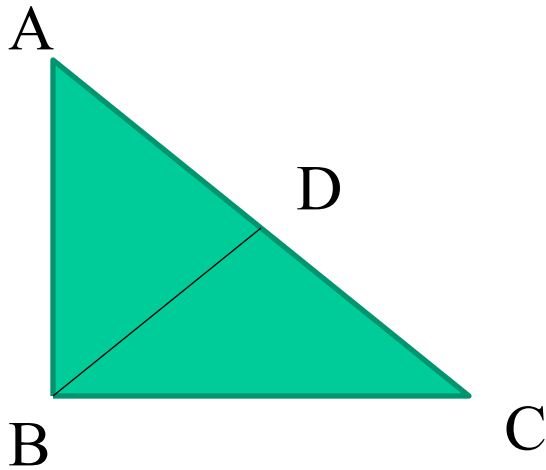
If  $CD = 5$  and  $AD = 4$ , what  
does  $BD = ?$



$$BD=25/4$$



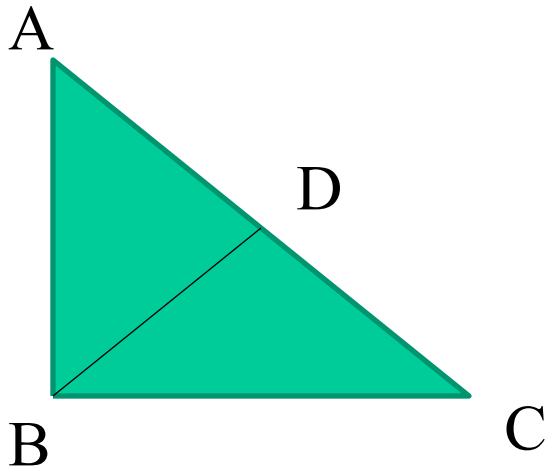
If  $CB=4$  and  $AB=3$ , find  $BD$



$$BD=16/3$$



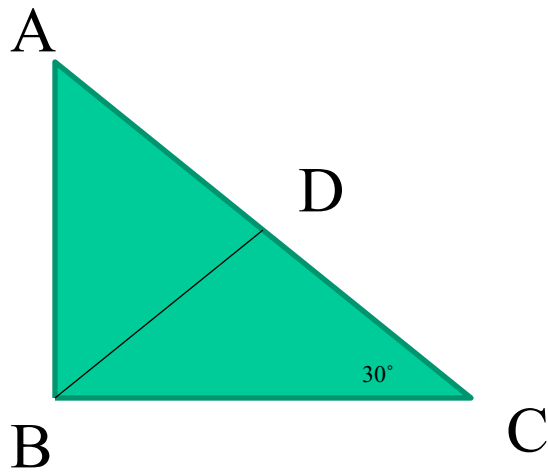
$AC=23$ ,  $AB=4$ , find  $AD$



$$AD = 529/4$$



# Name all Similar Triangles



Triangle ACB~Triangle ABD~  
Triangle BCD





# Explain Why the Proportions of the Geometric Mean Theorems Work

The Altitude forms 3 similar triangles.

