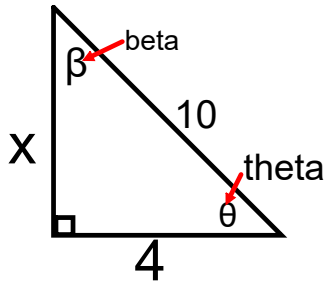
Find the measure of the missing side and angles.



$a^2 = c^2 - b^2$

$x^2 = 10^2 - 4^2$

$= 100 - 16$

$= \sqrt{84}$

$x = 9.2$

$\cos\theta = \frac{adj}{hyp}$

$= \frac{4}{10}$

$\theta = \cos^{-1}(4/10)$

$= 66^\circ$

$\beta = 180 - 90 - 66$

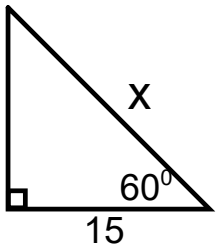
$= 24^\circ$

$\sin\beta = \frac{4}{10}$

$\beta = \sin^{-1}(4/10)$

$= 24^\circ$

Solve for x.



$\cos\theta = \frac{adj}{hyp}$

$\cos 60^\circ = \frac{15}{x}$

$x\cos 60^\circ = 15$

$\frac{x\cos 60^\circ}{\cos 60} = \frac{15}{\cos 60}$

$x = 30$

Calculating the answer without rounding until the end.

$$\frac{12}{\cos 53} = 19.94$$

Two methods...

1. Some calculators are straight forward.

   $12 \div \cos 53 =$

2. Other calculators...method two.

   53 [cos] [$1/x$] -1 $\times$ 12

   bottom to top

Homework...

Lesson 4 Worksheet 1