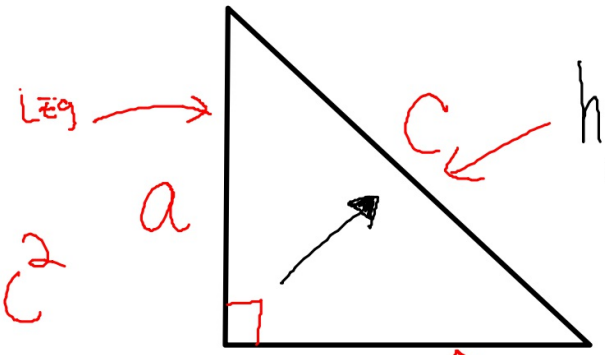
7.1 Applying the Pythagorean Theorem



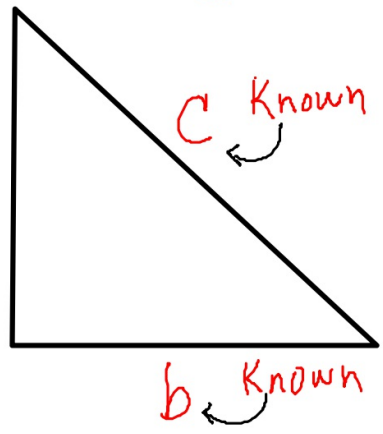
$a^2+b^2=c^2$

$\sqrt{a^2+b^2}=c$

Applying the Pythagorean Theorem

finding missing legs.

$a=\sqrt{c^2-b^2}$



finding a.

$a^2+b^2=c^2$

$-b^2 \quad -b^2$

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

Applying the Pythagorean Theorem

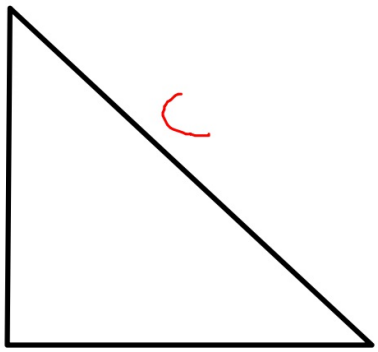
$b = \sqrt{c^2 - a^2}$

finding b

$a^2 + b^2 = c^2$

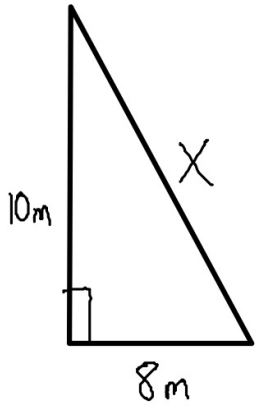
$-a^2 \quad -a^2$

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



Applying the Pythagorean Theorem

Find x.



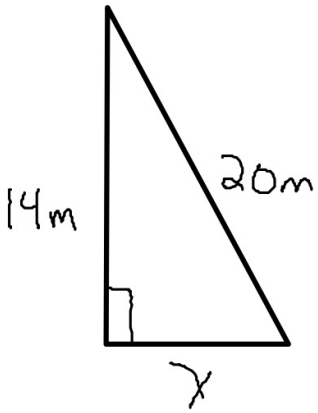
$10^2 + 8^2 = x^2$

$100 + 64$

$164 = x^2$

$\sqrt{164} = x$

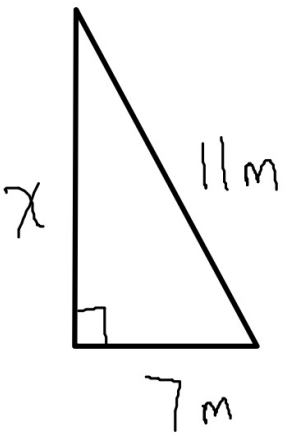
$x = 12.8$



$20^2 - 14^2 = x^2$

$400 - 196$

$\sqrt{204} = 14.3$



$11^2 - 7^2 = x^2$

$121 - 49 =$

$\sqrt{72} = 8.5$

H.W Pg 430

3-5

14-16