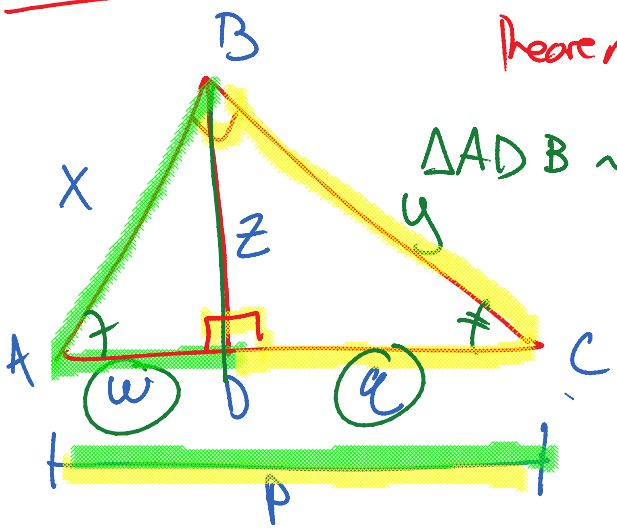
Wednesday, February 04, 2015
7:59 AM

(18) $\dfrac{-14 \pm \sqrt{228}}{2} = \dfrac{-14 \pm 2\sqrt{57}}{2}$

$\sqrt{228}$ / \ 114 / \ 57

$= -7 \pm \sqrt{57}$

Section 9.3



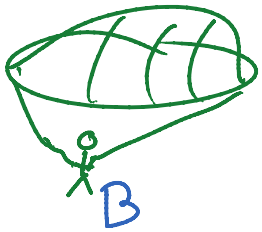
Theorem (Alt. on the hypo.)

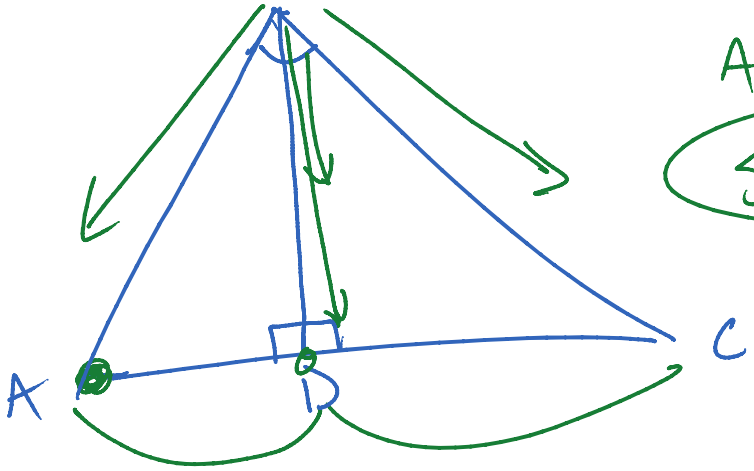
$\Delta ADB \sim \Delta ABC \sim \Delta BDC$

$\dfrac{w}{z} = \dfrac{z}{q}$ $\quad z^2 = w \cdot q$

$\dfrac{q}{y} = \dfrac{y}{p}$ $\quad y^2 = q \cdot p$

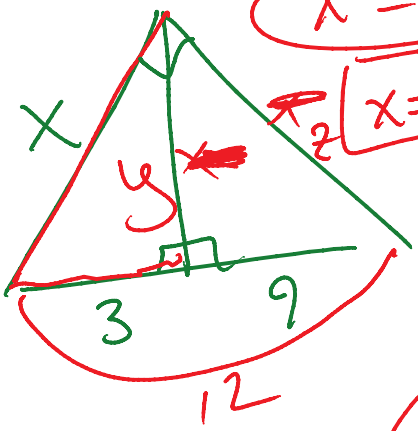
$\dfrac{w}{x} = \dfrac{x}{p}$ $\quad x^2 = w \cdot p$





$AB^2 = AD \cdot AC$

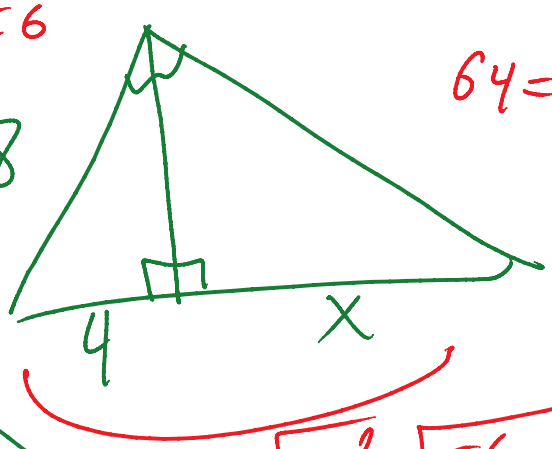
$Side^2 = walk \cdot walk$



$x^2 = 36$

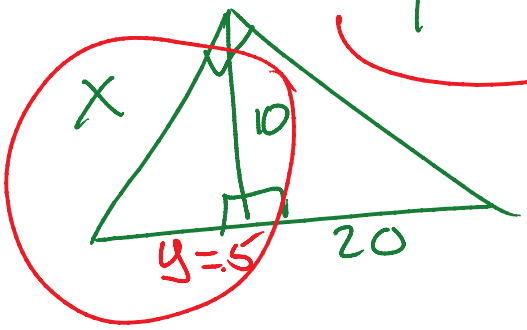
$x = \pm 6$

$x = 6$



$64 = 4(4+x)$

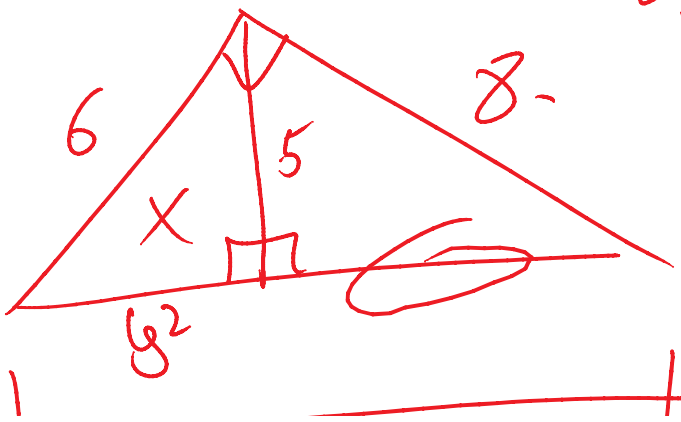
$x = 12$



$\sqrt{x^2} = \sqrt{5(25)}$

$x = 5\sqrt{5}$

$leg^2 + leg^2 = hypo^2$



$36 + 64 = x^2$

$x = 10$


y²
x = 10