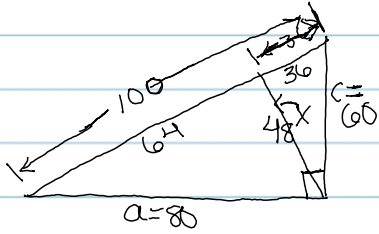
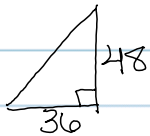
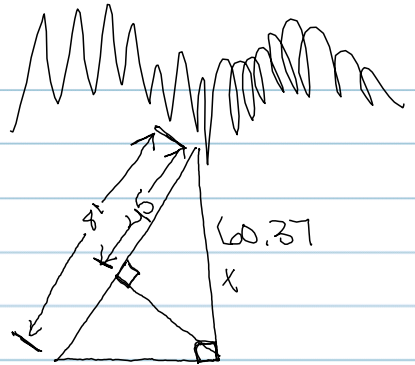


Geometry

Natalie
4.25.11



$$\begin{aligned}64 - x &= 36 \\ x &= 36 \\ \sqrt{x^2} &= \sqrt{2034} \\ x &= 48\end{aligned}$$

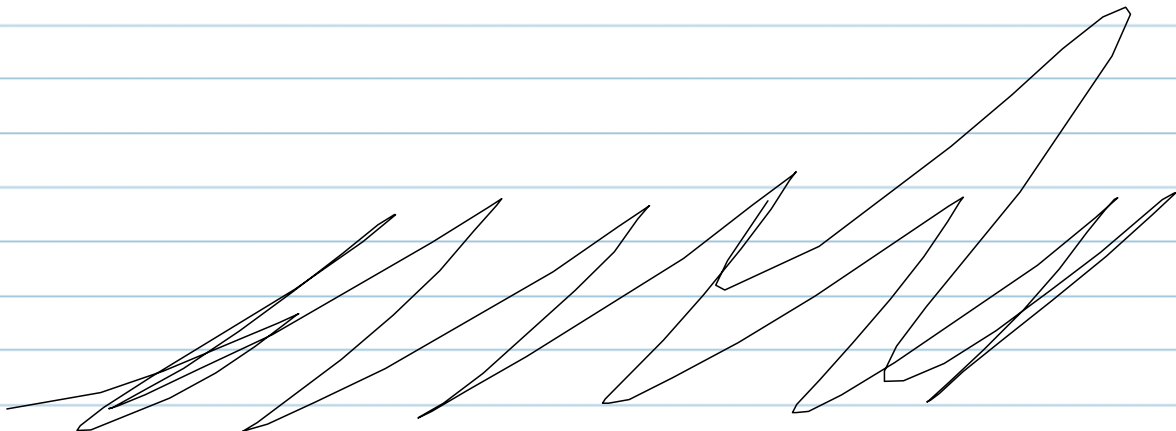


$$\begin{aligned}c &= \sqrt{a^2 + b^2} \\ c &= \sqrt{36^2 + 48^2} \\ c &= \sqrt{3600} \\ c &= 60\end{aligned}$$

$$\begin{aligned}a &= \sqrt{100^2 - 60^2} \\ a &= \sqrt{6400} \\ a &= 80\end{aligned}$$

$$\begin{aligned}\frac{45 - x}{x} &= 81 \\ \sqrt{x^2} &= 3625 \\ x &= 60.37\end{aligned}$$

Pythagorean Triple - a group of three whole numbers



All Geometry

Altitude
Hyp. Segments
(Geometric means)

$$\frac{6}{X} = \frac{X}{60}$$

$$\sqrt{X^2} = \sqrt{360}$$

$$X = 6\sqrt{10}$$

$$\frac{6}{18} = \frac{18}{X}$$

$$6X = 18 \cdot 18$$

$$X = 54$$

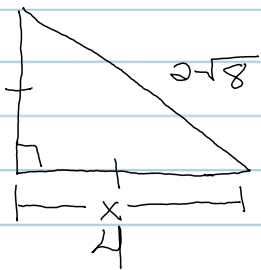
$$\frac{54}{X} = \frac{X}{60}$$

$$\sqrt{X^2} = \sqrt{3240}$$

$$X = \sqrt{3240}$$

30, 60, 90
 $c = 2a$
 $b = \sqrt{3}a$
 $a = 6$

45, 45, 90
 $h = \sqrt{2}(L)$
 $\frac{h}{\sqrt{2}} = \frac{x}{\sqrt{2}}$
 $\frac{h}{\sqrt{2}} = x$



$$\frac{2\sqrt{2}}{\sqrt{2}} = \frac{x}{\sqrt{2}}$$

$$2 = \frac{x}{\sqrt{2}}$$

$$2\sqrt{2} = x$$

$$x = 4$$

$$\frac{2\sqrt{2}}{\sqrt{2}} = \frac{x - \sqrt{2}}{\sqrt{2}}$$

$$2\sqrt{2} = x - \sqrt{2}$$

$$2 \cdot 2 = x$$

$$x = 4$$

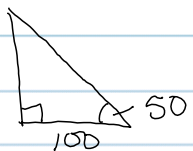
$$x = \frac{2\sqrt{2}}{\sqrt{2}} = 2$$

2, 5, 9 $\rightarrow 81 = 25 + 4$
 $c^2 = a^2 + b^2$
no right triangle

on calc.
 $\sin^{-1}(.5)$
 $\sin = \frac{1}{2}(.5)$

Right triangle
 $\sin \theta = \frac{b}{h}$
 $\sin \theta = \frac{b}{h}$

$10 \sin 30 = \frac{x}{10} \cdot 10$
 $10 \sin 30 = x$



$\tan \theta = \frac{a}{b}$
 $\tan 50 = \frac{x}{100}$
 $100 \tan 50 = x$ (1.2) = 120ft

