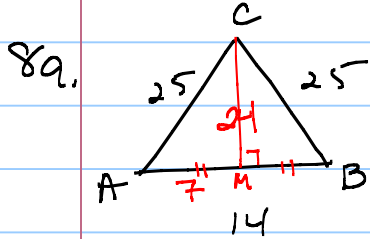
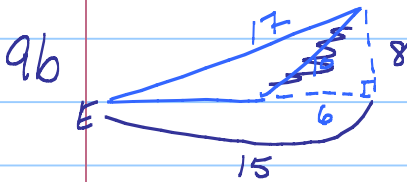


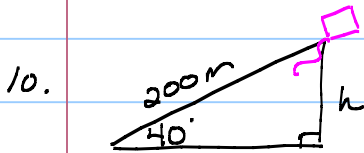
$$\tan \angle B = \frac{O}{A} = \frac{5}{2\sqrt{6}} \cdot \frac{\sqrt{6}}{\sqrt{6}} = \frac{5\sqrt{6}}{12}$$



$$\cos \angle A = \frac{A}{H} = \frac{7}{25}$$

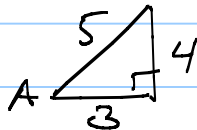


$$\sin \angle E = \frac{O}{H} = \frac{8}{17}$$

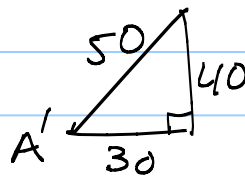


$$\begin{aligned} \frac{O}{H} &\Rightarrow \sin 40^\circ = \frac{h}{200} \\ 200 \cdot \sin 40^\circ &= h \\ 200 (.6428) &= h \\ 128.56 &= h \end{aligned}$$

ASIDE

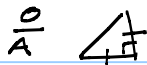


$$\sin \angle A = \frac{4}{5}$$

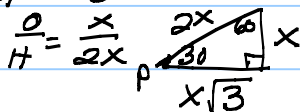


$$\sin A' = \frac{40}{50} = \frac{4}{5}$$

11. $\tan A = 1 \Rightarrow m\angle A = 45^\circ$



11b. $\sin \angle P = \frac{1}{2} \Rightarrow m\angle P = 30^\circ$

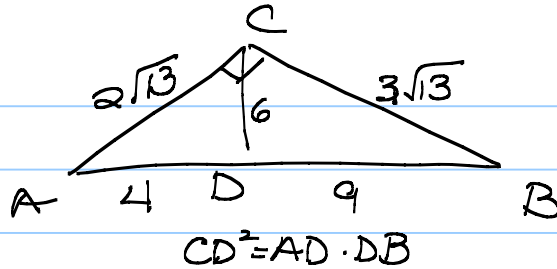
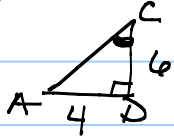


12. $\sin \angle P = \frac{3}{5}$

$$\cos P = \frac{4}{5}$$

$$3(2, 3, \sqrt{13})$$

13a) $\tan \angle ACD = \frac{4}{6} = \frac{2}{3}$

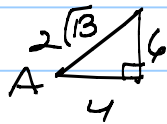


$$4, 6, -$$

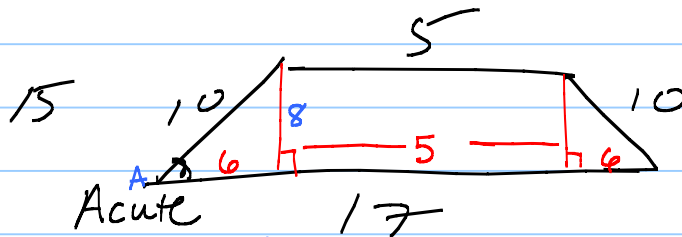
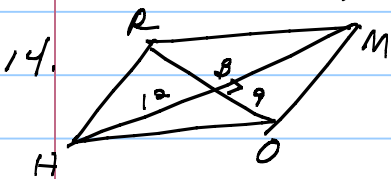
$$2(2, 3, \sqrt{13})$$

13b. $\sin \angle A = \frac{3\sqrt{13}}{13}$

$$\sin \angle A = \frac{6}{2\sqrt{13}} \cdot \frac{\sqrt{13}}{\sqrt{13}}$$



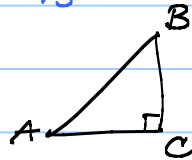
$$\frac{3 \cdot 6 \sqrt{13}}{2 \cdot 13} = \frac{3\sqrt{13}}{13}$$



$$\sin \angle A = \frac{4}{5}$$

16. a. $\sin \angle A = \cos \angle B$: Always

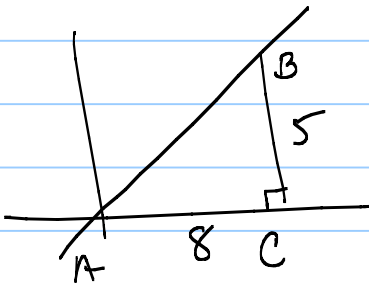
b. $\sin \angle A = \tan \angle A$: Never
 $\frac{O}{H} = \frac{O}{A}$ hyp \neq adj



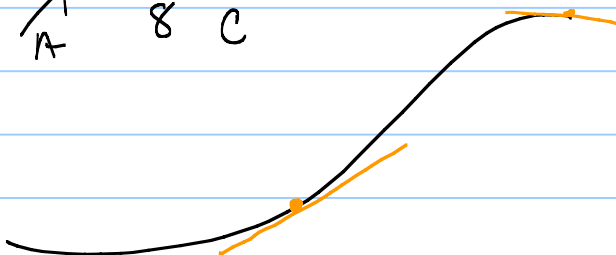
c. $\sin \angle A = \cos \angle A$: Sometimes

$$\frac{O}{H} = \frac{A}{H}$$

18.



$$\frac{\Delta y}{\Delta x} = \frac{5}{8} \quad \tan \Rightarrow \frac{O}{A}$$



9.10 : Trig Ratios

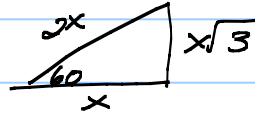
1. a. $\sin 21^\circ \approx .3584$

b. $\tan 52^\circ \approx 1.2799$

c. $\cos 5^\circ \approx .9962$

d. $\tan 45^\circ = 1$

e. $\sin 60^\circ \approx .8660 = \frac{\sqrt{3}}{2}$



$$\frac{x\sqrt{3}}{2x}$$

2a. $\sin \angle A \approx .4067$

$\angle A = 24^\circ$

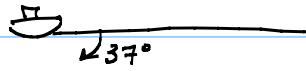
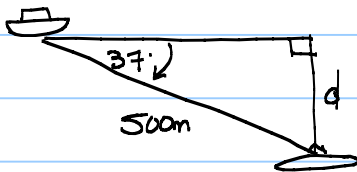
$\sin \angle A = .4067$
not mult

$\text{arc-sin}(\sin \angle A) = \text{arcsin} .4067$

$\angle A = \text{arcsin} .4067$

$\angle A = \sin^{-1} (.4067)$

10.



ALLS measured off horizontal line.