

Algebra 2 Monday 1-28-13 Class Notes

④
ID 2

$$\frac{\sin^2 \theta}{1 - \cos^2 \theta} = \frac{\sin^2 \theta}{\sin^2 \theta}$$
$$= \boxed{1}$$

①
ID 1

$$\tan^2 \theta + 1$$

$$\boxed{\sec^2 \theta}$$

$$\frac{\sin^2 \theta}{\cos^2 \theta} + \frac{\cos^2 \theta}{\cos^2 \theta} = \frac{1}{\cos^2 \theta}$$

$$\tan^2 \theta + 1 = \sec^2 \theta$$

Graded Quiz Review

Quiz Review

(5)
ID2

$$\frac{\sin \theta - \cos \theta}{\sin \theta}$$

$$\frac{\sin \theta}{\sin \theta} - \frac{\cos \theta}{\sin \theta}$$

$$\boxed{1 - \cot \theta}$$

(5)
ID2

$$\sec \theta - \tan \theta \sin \theta$$

$$\sec \theta - \frac{\sin \theta}{\cos \theta} \cdot \sin \theta$$

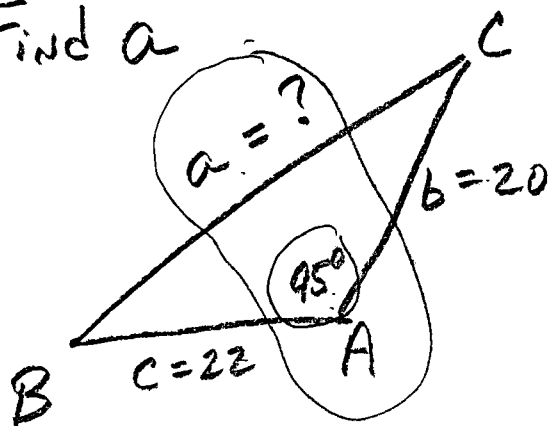
$$\frac{1}{\cos \theta} - \frac{\sin^2 \theta}{\cos \theta}$$

$$\frac{1 - \sin^2 \theta}{\cos \theta} = \frac{\cos^2 \theta}{\cos \theta}$$

$$= \boxed{\cos \theta}$$

Worksheet Practice

- ① $\triangle ABC$, $b=20$, $m\angle A=95^\circ$, $c=22$
Find a



SAS = LOC
 $\left. \begin{array}{l} \text{ref}^\circ = 85^\circ \\ \text{Cos is } (-) \end{array} \right\}$

$$a^2 = 22^2 + 20^2 - 2(22)(20)(-\cos 85^\circ)$$

$$a^2 = 484 + 400 + 880(.0872)$$

$$a^2 = 884 + 76.6976$$

$$a^2 = 960.736$$

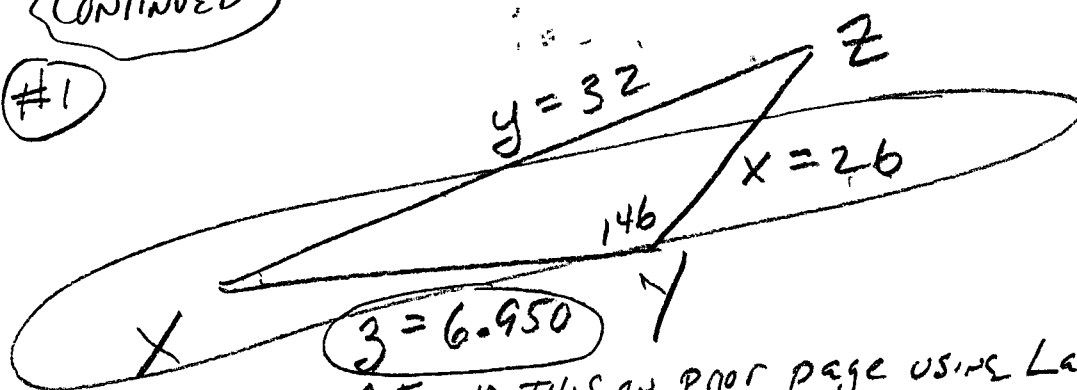
$$a = 30.9957$$

$$\boxed{a = 31.0} \quad \checkmark$$

SSA \Rightarrow Ambiguous Case of LOS
 \Rightarrow use LOC, Quadratic will
 give 0, 1, or 2 positive solutions

CONTINUED

#1



$$z = 6.950$$

↑ FOUND THIS ON PAST PAGE USING LAW OF COSINES

USE
LOC
AGAIN

$$26^2 = 32^2 + 6.95^2 - 2(32)(6.95) \cos X$$

$$676 = 1024 + 48.3025 - 444.8 \cos X$$

$$676 = 1072.3025 - 444.8 \cos X$$

$$-1072.3025 \quad -1072.3025$$

$$\frac{-396.3025}{-444.8} = \frac{-444.8 \cos X}{-444.8}$$

$$.89096 = \cos X$$

$$\cos^{-1}(.89096) = 27.00 = 27^\circ$$