You must complete this before retaking the MC again. Remember it is all about LEARNING so take your time and learn how to do these skills. If you need help please ask!

NAME:_____

Corrective Assignment 11.4

Directions: Tell whether each statement is true.

1) $\cos(\frac{80}{2}°) = \pm\sqrt{\frac{1-\cos 80}{2}}$

2) $\sin 60° = 2\sin 30° \cos 30°$

3) $\tan 100° = -\sqrt{\frac{1-\cos 200°}{1+\cos 200°}}$

Directions: Find the exact value of the given function.

4) $\cos 15°$

5) $\sin\frac{7\pi}{12}$

Directions: For #6-9: If $\sin x = \frac{4}{5}$ and x is in Quadrant II, find each value. Draw the reference triangle.

6) $\cos 2x$

7) $\sin\frac{x}{2}$

Directions: For #10-13: If $\cos\theta = -\frac{2}{3}$ and x is in Quadrant II, find each value. Draw the reference triangle.

8) $\tan 2\theta$

9) $\cos\frac{\theta}{2}$

Directions: Verify the following identities.

10) $\frac{2\cos 2x}{\sin 2x} = \cot x - \tan x$

11) $\cot x \sin 2x = 1 + \cos 2x$

---

1) No, should be + cos 80 2) Yes 3) Yes 4) $\sqrt{\frac{2+\sqrt{3}}{4}}$ or $\frac{\sqrt{2+\sqrt{3}}}{2}$ 5) $\sqrt{\frac{2+\sqrt{3}}{4}}$ or $\frac{\sqrt{2+\sqrt{3}}}{2}$ 6) $-\frac{7}{25}$ 7) $\frac{2\sqrt{5}}{5}$ 8) $4\sqrt{5}$ 9) $\frac{\sqrt{6}}{6}$

10) One Possibility

$\frac{2(cos^2x - sin^2x)}{2\sin x\cos x} = \cot x - \tan x$

$\frac{(cos^2x - sin^2x)}{\sin x\cos x} = \cot x - \tan x$

$\frac{cos^2x}{\sin x\cos x} - \frac{sin^2x}{\sin x\cos x} = \cot x - \tan x$

$\frac{\cos x}{\sin x} - \frac{\sin x}{\cos x} = \cot x - \tan x$

$\cot x - \tan x = \cot x - \tan x$

11) One Possibility

$\frac{\cos x}{\sin x}(2\sin x\cos x) = 1 + \cos 2x$

$\cos x\,(2\cos x) = 1 + \cos 2x$

$2\,cos^2x = 1 + \cos 2x$

$2\,cos^2x = 1 + 2cos^2x - 1$

$2\,cos^2x = 2\,cos^2x$