Test Review!!!

1. Verify: $\csc x \sec x = \cot x + \tan x$

2. Find the exact value of $\cos(x - y)$ if $\tan x = \frac{3}{4}$, $\sec y = -\frac{3}{2}$ and x and y are in Quadrant III.

3. Find the exact value of $\sin(x - 270°)$.

4. Find the exact value of the $\cos 195^{o}$.

5. If $\csc\theta = -\frac{5}{4}$, and θ is in Quad III, find the exact value of:

a. $\sin 2\theta$ *b*. $\cos 2\theta$ *c*. $\tan 2\theta$

d. $\sin\frac{\theta}{2}$ *e*. $\cos\frac{\theta}{2}$

6. Solve $3\sec^2\theta + 5\sec\theta - 2 = 0$ for all values of θ in the interval $0° \leq \theta < 360°$.

7. Solve $\cos^2\theta - \cos\theta + 1 = \sin^2\theta$ for all values of θ in the interval $0° \leq \theta < 360°$.