Group Work: Identities

1. Given $sinx=-\frac{3}{5}$ and $cosy=-\frac{7}{25}$ where both x and y are in Quadrant III, find $\cos(\left(x-y\right))=$

2. Verify the identity by only working on one side only.

 $tanθ sin2θ=2-2cos^{2}θ$

3. Verify the identity by only working on one side only.

$$2cos^{2}θ-1=\frac{1-tan^{2}θ}{1+tan^{2}θ}$$

4. Verify the identity by only working on one side only.

 $\frac{sin^{2}θ}{2-2cosθ}=cos^{2}\left(\frac{θ}{2}\right)$