

Name: _____

Date: _____

Instructions: Please complete the following problems for practice.

Problem 1. Find the exact value: $2 \cos^2(165^\circ) - 1$

Problem 2. Use the half angle identity to find: $\sin\left(\frac{\pi}{8}\right)$

Problem 3. Find the exact value: $1 - 2 \sin^2(15^\circ)$

Problem 4. Use power reducing formulas to find: $\sin^2(x) \cdot \cos^2(x)$

Problem 5. Find $\tan \frac{7\pi}{8}$

Problem 6. Given $\sin \theta = \frac{3}{5}$, in Q2, find $\sin(2\theta)$, $\cos(2\theta)$, and $\tan(2\theta)$