1. Calculate $\angle pOq$ where $p = \left(\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$ and $q = \left(-\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$.

2. Determine the fraction of the circle of the angle whose radian measure is $\frac{\pi}{4}$.

3. Calculate sine, cosine, and tangent at the following angles $\theta = 120°$, $\theta = \frac{7\pi}{6}$.

4. There are angles A in quadrant I and B in quadrant III so that $\cos(A) = \frac{2}{5}$ and $\sin(B) = -\frac{1}{8}$. Determine $\sin(A - B)$ and $\tan(A - B)$.

5. Use the half angle formula to determine $\cos(45°)$ and $\cos(22.5°)$.

6. Determine $R_\theta(1, 2)$.