Precalculus Name _____

WS Single Trig Functions – Double & Half Angles

Write as a single trig function of a single angle.

1. $\sqrt{\frac{1-\cos(80°)}{2}}$

2. $\cos^2\left(\frac{2\pi}{7}\right)-\sin^2\left(\frac{2\pi}{7}\right)$

3. $\sqrt{\frac{1+\cos(100°)}{2}}$

4. $\frac{2\tan(35°)}{1-\tan^2(35°)}$

5. $\frac{1-\cos 98°}{\sin 98°}$

6. $2\sin\left(\frac{\pi}{5}\right)\cos\left(\frac{\pi}{5}\right)$

7. $2\cos^2\left(\frac{2\pi}{5}\right)-1$

8. $1-2\sin^2\left(\frac{\pi}{8}\right)$