Name: _____ Date _____

Mr. Schlansky Algebra II

Double Angle Identities

1. The expression $\frac{\sin 2A}{2\cos A}$ is equivalent to

(1) $\cos A$ (2) $\tan A$ (3) $\sin A$ (4) $\frac{1}{2}\sin A$

2. The expression $\frac{2\sin A}{\sin 2A}$ is equivalent to:

(1) tan A (2) sec A (3) 1 (4) -1

3. The expression $\frac{\sin 2\theta}{\sin^2 \theta}$ is equivalent to

(1) $\frac{2}{\sin\theta}$ (3) $2\cot\theta$

(2) $2\cos\theta$ (4) $2\tan\theta$

4. The expression $\frac{2\sin 2A}{2\cos^2 A}$ is equivalent to:

(1) 2csc A (2) 2tan A (3) 1 (4) -1

5. The expression $\frac{4\cos A}{\sin 2A}$ is equivalent to:

(1) 2sin A (2) 2csc A (3) 4tan A (4) $\frac{2}{\cos A}$

6. The expression $\cos^2\theta - \cos 2\theta$ is equivalent to

(1) $\sin^2\theta$ (2) $-\sin^2\theta$ (3) $\cos^2\theta + 1$ (4) $-\cos^2\theta - 1$

7. The expression $\frac{1+\cos 2A}{\sin 2A}$ is equivalent to

1) $\cot A$
2) $\tan A$
3) $\sec A$
4) $1 + \cot 2A$

8. The expression $\frac{\cos 2A}{\sin^2 A - \cos^2 A}$ is equivalent to:

(1) tan A (2) sec A (3) 1 (4) -1