

**A.** -1**B.**  $\sec \theta$ **C.** 1**D.**  $\sin^2 \theta$ **E.** 2**F.**  $\cos^2 \theta$ **G.**  $\sec \theta \csc \theta$ **H.**  $\cos \theta$ 

**Directions:** Simplify the following expressions and match your answer with one of the answers in the box above. Each answer should be used exactly once. Be sure to show all appropriate work that leads to your answer.

1.  $\tan^2 \theta - \sec^2 \theta$

2.  $\tan \theta \sin \theta + \cos \theta$

3. 
$$\frac{\tan^2 \theta}{1 + \tan^2 \theta}$$

4.  $\tan \theta + \cot \theta$

5.  $\sec \theta - \tan \theta \sin \theta$

6. 
$$\frac{(\csc^2 \theta - 1)}{\csc^2 \theta}$$

7. 
$$\frac{\csc \theta}{\sin \theta} - \frac{\cot \theta}{\tan \theta}$$

8.  $(\sin \theta - \cos \theta)^2 + (\sin \theta + \cos \theta)^2$