

Accelerated Integrated 3  
Chapter 8-9  
Review WS 8.4-8.5

Name \_\_\_\_\_  
Period \_\_\_\_\_  
A# \_\_\_\_\_

Solve each equation for  $0^\circ \leq \theta < 360^\circ$ . Give answer to the nearest tenth of a degree.

1.  $2 \cos^2 \theta + 3 \sin \theta - 3 = 0$

2.  $\cos \theta \cot \theta = 2 \cos \theta$

Simplify each expression.

3.  $\cot A(\sec A - \cos A)$

4.  $\frac{\cot \theta}{\sin(90^\circ - \theta)}$

5.  $(\sec x + \tan x)(1 - \sin x)$

6.  $\frac{\cot x + \tan x}{\csc^2 x}$

Prove the given identity.

7. 
$$\frac{\cot A(1 + \tan^2 A)}{\tan A} = \csc^2 A$$

8. The sides of an isosceles triangle have lengths 5, 10, and 10. What are the measures of the angles?

9. A regular pentagon is inscribed in a circle with a radius of 4 inches. Find the area of the pentagon.