

## Chap. 9 Supp. Answers

1)  $\frac{\sqrt{3}}{2}$

2)  $\tan 2\theta$

3)  $\frac{3\sqrt{3}}{2}$

4)  $\frac{3\sqrt{10}}{10}, \frac{-\sqrt{10}}{10}, -3$

5)  $\frac{\sqrt{26}}{26}, \frac{-5\sqrt{26}}{26}, -\frac{1}{5}$

6)  $\frac{\sqrt{2+\sqrt{3}}}{2}, \frac{\sqrt{2-\sqrt{3}}}{2}; 2+\sqrt{3}$

7)  $-\frac{\sqrt{2-\sqrt{2}}}{2}, -\frac{\sqrt{2+\sqrt{2}}}{2}; \sqrt{2}-1$

8)  $\csc\theta \sec\theta$

9)  $2\sin\theta \cos\theta$

10)

$$\csc\theta - \cot\theta$$

$$= \frac{1}{\sin\theta} - \frac{\cos\theta}{\sin\theta}$$

$$= \frac{1 - \cos\theta}{\sin\theta}$$

$$= \tan \frac{\theta}{2}$$

start on right

Def. of  $\csc + \cot$

Simplify

Half Angle Formula