$$\sec^2 x - \tan x \cot x = \tan^2 x$$

$$\sec^2 x - \frac{\sin x}{\cos x} \frac{\cos x}{\sin x} =$$

$$\sec^2 x - 1 =$$

$$\tan^2 x + 1 - 1 =$$

$$\tan^2 x = \tan^2 x$$

$$\frac{\sin A}{\csc A} + \frac{\cos A}{\sec A} = \csc^2 A - \cot^2 A$$

$$\frac{\sin A}{\frac{1}{\sin A}} + \frac{\cos A}{\frac{1}{\cos A}} = 1 + \cot^2 A - \cot^2 A$$

$$\sin^2 A + \cos^2 A = 1$$

$$1 = 1$$

$$\frac{7\sin\theta + 5\cos\theta}{\sin\theta\cos\theta} = 7\sec\theta + 5\csc\theta$$

$$\frac{7\sin\theta}{\sin\theta\cos\theta} + \frac{5\cos\theta}{\sin\theta\cos\theta} =$$

$$\frac{7}{\cos\theta} + \frac{5}{\sin\theta} =$$

$$7\left(\frac{1}{\cos\theta}\right) + 5\left(\frac{1}{\sin\theta}\right) =$$

$$7\sec\theta + 5\csc\theta = 7\sec\theta + 5\csc\theta$$

p. 434

13-27 odd