

1. $\cot \theta = -\frac{\sqrt{3}}{3}$

2. $\sec \theta = \frac{-4\sqrt{7}}{7}$

3. $\sin \theta = -\frac{\sqrt{17}}{17}$

4. $\csc \theta = \frac{-\sqrt{10}}{2}$

5. $\sec \theta$

6. $\sin^2 \theta$

7. -1

8. $\cot \theta$

9. $\sec \theta$

10. $\csc \theta$

$$\cos \theta \cdot \frac{\cos \theta}{\sin \theta} + \sin^2 \theta \cdot \frac{1}{\sin \theta} = \csc \theta$$

$$\frac{\cos^2 \theta + \sin^2 \theta}{\sin \theta} = \csc \theta$$

11. $\frac{1}{\sin \theta} = \csc \theta$ $\csc \theta = \csc \theta$

$$\frac{1}{\sin\theta} - \sin\theta = \frac{\overset{\text{csc}\theta}{\cot^2\theta}}{\text{csc}\theta}$$

$$\frac{1 - \sin^2\theta}{\sin\theta} = \frac{\cot^2\theta}{\text{csc}\theta}$$

$$\frac{\cos^2\theta}{\sin\theta} = \frac{\cot^2\theta}{\text{csc}\theta}$$

$$12. \frac{\sin\theta \cos^2\theta}{\sin^2\theta} = \frac{\cot^2\theta}{\text{csc}\theta} \quad \boxed{\frac{\cot^2\theta}{\text{csc}\theta} = \frac{\cot^2\theta}{\text{csc}\theta}}$$

$$\frac{1}{\sec^2\theta} = \cos^2\theta$$

$$13. \boxed{\cos^2\theta = \cos^2\theta}$$

$$\tan^2\theta = \frac{1}{\sin^2\theta} \cdot \frac{\sin^2\theta}{\cos^2\theta} - 1$$

$$\tan^2\theta = \frac{1}{\cos^2\theta} - 1$$

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

$$14. \boxed{\tan^2\theta = \tan^2\theta}$$

$$\frac{\frac{1}{\sin\theta} \cdot \cos\theta}{\frac{\sin\theta}{\cos\theta} + \frac{\cos\theta}{\sin\theta}} = \cos^2\theta$$

$$\frac{\cos\theta}{\sin\theta} = \cos^2\theta \quad \frac{\cos\theta}{\sin\theta} \cdot \frac{\sin\theta \cos\theta}{1} = \cos^2\theta$$

$$\frac{\cos\theta}{\sin^2\theta + \cos^2\theta} = \cos^2\theta \quad \frac{\cos\theta}{\sin\theta} \cdot \frac{\sin\theta \cos\theta}{1} = \cos^2\theta$$

$$15. \frac{\cos\theta}{\sin\theta \cos\theta} = \cos^2\theta \quad \boxed{\cos^2\theta = \cos^2\theta}$$

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

$$\frac{\cos^2\theta - \sin\theta + \sin^2\theta}{\cos\theta(1-\sin\theta)} = \sec\theta$$

$$\frac{1-\sin\theta}{\cos\theta(1-\sin\theta)} = \sec\theta$$

16. $\sec\theta = \sec\theta$