

P. 478 #12-38 even

12. $\sqrt{17}$

30. $\frac{24}{25}$

14. $\frac{3}{4}$

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

16. $\cos^2 x + \frac{\sin^2 x}{\cos^2 x} \cos^2 x = 1$

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

$$1 = 1$$

32. $-\frac{24}{7}$

34. 0°

$$\frac{\sec \mathbf{q} + 1}{\tan \mathbf{q}} = \frac{\tan \mathbf{q}}{\sec \mathbf{q} - 1}$$

$$\frac{\sec \mathbf{q} + 1}{\tan \mathbf{q}} = \frac{\tan \mathbf{q}(\sec \mathbf{q} + 1)}{\sec^2 \mathbf{q} - 1}$$

18. $\frac{\tan \mathbf{q}}{\sec \mathbf{q} + 1} = \frac{\tan \mathbf{q}(\sec \mathbf{q} + 1)}{\sec^2 \mathbf{q} - 1}$

$$\frac{\tan \mathbf{q}}{\sec \mathbf{q} + 1} = \frac{\tan^2 \mathbf{q}}{\sec \mathbf{q} + 1}$$

$$\frac{\sec \mathbf{q} + 1}{\tan \mathbf{q}} = \frac{\sec \mathbf{q} + 1}{\tan \mathbf{q}}$$

36. $0^\circ, 30^\circ, 150^\circ, 180^\circ$

38. $p \mathbf{k}, \frac{2p}{3} + 2p \mathbf{k}, \frac{4p}{3} + 2p \mathbf{k}$

20. $\frac{-\sqrt{6} - \sqrt{2}}{4}$

22. $\frac{\sqrt{6} + \sqrt{2}}{4}$

24. $\frac{48 + 7\sqrt{5}}{75}$

26. $\sqrt{\frac{2 - \sqrt{3}}{2}}$

28. $\sqrt{\frac{2 - \sqrt{2}}{2}}$