

Precalculus

4.4 HW – Odd Answers

$$\begin{aligned} 1. \quad \sin \alpha &= 4/5 & \csc \alpha &= 5/4 \\ \cos \alpha &= 3/5 & \sec \alpha &= 5/3 \\ \tan \alpha &= 4/3 & \cot \alpha &= 3/4 \end{aligned}$$

$$\begin{aligned} 3. \quad \sin \alpha &= -3/\sqrt{13} & \csc \alpha &= -\sqrt{13}/3 \\ \cos \alpha &= -2/\sqrt{13} & \sec \alpha &= -\sqrt{13}/2 \\ \tan \alpha &= 3/2 & \cot \alpha &= 2/3 \end{aligned}$$

$$\begin{aligned} 5. \quad \csc \alpha &= 17/8 \\ \cos \alpha &= 15/17 & \sec \alpha &= 17/15 \\ \tan \alpha &= 8/15 & \cot \alpha &= 15/8 \end{aligned}$$

$$\begin{aligned} 7. \quad \sin \beta &= 24/25 & \csc \beta &= 25/24 \\ \sec \beta &= -25/7 \\ \tan \beta &= -24/7 & \cot \beta &= -7/24 \end{aligned}$$

$$9. \quad \frac{\sqrt{3}}{2}$$

$$11. \quad 0$$

$$13. \quad -\sqrt{2}$$

$$15. \quad \frac{\sqrt{2}}{2}$$

$$17. \quad -\frac{1}{\sqrt{3}} \text{ or } -\frac{\sqrt{3}}{3}$$

$$19. \quad -2$$

$$21. \quad \frac{\sqrt{2}}{2}$$

$$23. \quad \frac{1}{\sqrt{3}} \text{ or } \frac{\sqrt{3}}{3}$$

$$25. \quad -1$$

$$27. \quad \frac{\sqrt{3}}{2}$$

$$29. \quad \sqrt{3}$$

$$31. \quad \frac{2}{\sqrt{3}} \text{ or } \frac{2\sqrt{3}}{3}$$

$$33. \quad 1$$

$$35. \quad \frac{\sqrt{3}}{2}$$

$$37. \quad \frac{\pi}{6}$$

$$39. \quad 0$$

$$41. \quad \frac{2\pi}{3}$$

$$43. \quad \frac{\pi}{4}$$

$$45. \quad 160^\circ 42' 16''$$

$$47. \quad \frac{7\pi}{9}$$

$$49. \quad 178.5 \text{ mph}$$

$$51. \quad b \approx 5.7$$

$$\alpha \approx 34.8^\circ$$

$$\beta \approx 55.2^\circ$$