

SM2H Review 8.1-8.4 Key

$$\begin{aligned} \sin q &= \frac{12}{13} \\ \cos q &= \frac{5}{13} \\ \tan q &= \frac{12}{5} \\ 1. \quad \csc q &= \frac{13}{12} \\ \sec q &= \frac{13}{5} \\ \cot q &= \frac{5}{12} \end{aligned}$$

$$\begin{aligned} \sin q &= \frac{\sqrt{105}}{11} \\ \cos q &= \frac{4}{11} \\ \tan q &= \frac{\sqrt{105}}{4} \\ 2. \quad \csc q &= \frac{11\sqrt{105}}{105} \\ \sec q &= \frac{11}{4} \\ \cot q &= \frac{4\sqrt{105}}{105} \end{aligned}$$

$$3. \tan q = \frac{\sqrt{69}}{10}$$

$$4. \cos q = \frac{2}{3}$$

$$5. x = 5.28$$

$$6. x = 34.85^\circ$$

$$7. x = 25.59$$

$$8. x = 7.95$$

$$9. x = 6.49$$

$$10. x = 18.93$$

$$11. x = 64.98^\circ$$

$$12. x = 70.53^\circ$$

$$13. x = 4.13$$

$$m\angle A = 39^\circ$$

$$m\angle B = 51^\circ$$

$$14. m\angle C = 90^\circ$$

$$a = 11$$

$$b = 13.58$$

$$c = 17.48$$

$$m\angle A = 19.65^\circ$$

$$m\angle B = 70.35^\circ$$

$$15. m\angle C = 90^\circ$$

$$a = 5$$

$$b = 14$$

$$c = 14.87$$

$$16. \text{ angle measure} = 308^\circ \\ \text{reference angle} = 52^\circ$$

$$17. \text{ angle measure} = 223^\circ \\ \text{reference angle} = 43^\circ$$

$$\sin q = \frac{2\sqrt{5}}{5}$$

$$18. \cos q = \frac{\sqrt{5}}{5}$$

$$\tan q = 2$$

$$\sin q = \frac{-3}{5}$$

$$19. \cos q = \frac{4}{5}$$

$$\tan q = \frac{-3}{4}$$

$$20. q = 105.9454^\circ$$

$$21. q = 320.1944^\circ$$

$$22. \begin{aligned} x &= 6\sqrt{2} \\ y &= 6\sqrt{2} \end{aligned}$$

$$23. \begin{aligned} x &= 6\sqrt{2} \\ y &= 3\sqrt{6} \end{aligned}$$

$$24. \begin{aligned} x &= 3\sqrt{2} \\ y &= 3\sqrt{2} \end{aligned}$$

$$25. q = 240^\circ$$

$$26. q = 135^\circ$$

$$27. q = 30^\circ$$