

4.14b Quiz Review WS – Trig Sum/Difference and Double Angle Evaluation of Identities

Use the sum & difference identities with unit circle values to find exact answers for the following:

1) $\tan -105^\circ$

2) $\cos 15^\circ$

Given: $\csc \alpha = \frac{13}{5}$, $\frac{\pi}{2} \leq \alpha \leq \pi$, and $\tan \beta = -\frac{3}{4}$, $\frac{3\pi}{2} \leq \beta \leq 2\pi$, find the following:

3) $\sin(\alpha - \beta)$

4) $\cos(\beta + \alpha)$

5) $\tan(\alpha - \beta)$

If $\sin \theta = -\frac{3}{5}$ and $\cos \theta < 0$

6) $\cos\left(\theta + \frac{\pi}{3}\right)$

7) $\tan 2\theta$

Find the Following:

8) $\sin(\pi - x) =$

9) $\cos(30^\circ - x) + \cos(30^\circ + x) =$