

§2.4: Sum and Difference Formulas

- 1.] Find the exact value of $\sin(u + v)$ given that $\sin(u) = 4/5$, where u is an angle in the first quadrant, and $\cos(v) = -12/13$, where v is in the second quadrant.

- 2.] Find all solutions to the following equation within the interval $[0, 2\pi)$:

$$\sin\left(x + \frac{\pi}{4}\right) + \sin\left(x - \frac{\pi}{4}\right) = -1$$

3.] Find all solutions to the following equation within the interval $[0, 2\pi)$:

$$\tan(x + \pi) + 2 \sin(x + \pi) = 0$$