

## Review Quiz Sum & Difference

Use the angle sum identity to find the exact value of each.

1)  $\sin 75^\circ$

2)  $\cos \frac{17\pi}{12}$

3)  $\sin \frac{13\pi}{12}$

Use the angle difference identity to find the exact value of each.

4)  $\cos(-75^\circ)$

5)  $\cos \frac{5\pi}{12}$

6)  $\tan(-\frac{7\pi}{12})$

Use the angle sum or difference identity to find the exact value of each.

7)  $\cos 195^\circ$

8)  $\cos(-\frac{\pi}{12})$

9)  $\sin(-15^\circ)$

10)  $\sin \frac{5\pi}{12}$

11)  $\tan(-\frac{5\pi}{12})$

12)  $\cos \frac{7\pi}{12}$

13) Find the exact value of the trigonometric function given the following information:

$$\tan u = 4/3; \pi < u < 3\pi/2 \text{ and } \sin v = 7/25; \pi/2 < v < \pi$$

a)  $\sin(u-v)$

b)  $\cos(u-v)$

c)  $\tan(u+v)$

## Answers to Review Quiz Sum & Difference

$$1) \frac{\sqrt{6} + \sqrt{2}}{4}$$

$$2) \frac{\sqrt{2} - \sqrt{6}}{4}$$

$$3) \frac{\sqrt{2} - \sqrt{6}}{4}$$

$$4) \frac{\sqrt{6} - \sqrt{2}}{4}$$

$$5) \frac{\sqrt{6} - \sqrt{2}}{4}$$

$$6) 2 + \sqrt{3}$$

$$7) \frac{-\sqrt{6} - \sqrt{2}}{4}$$

$$8) \frac{\sqrt{6} + \sqrt{2}}{4}$$

$$9) \frac{\sqrt{2} - \sqrt{6}}{4}$$

$$10) \frac{\sqrt{6} + \sqrt{2}}{4}$$

$$11) -2 - \sqrt{3}$$

$$12) \frac{\sqrt{2} - \sqrt{6}}{4}$$

$$13) \text{ a) } \frac{117}{125} \quad \text{ b) } \frac{44}{125} \quad \text{ c) } \frac{3}{4}$$