5.4 Sum and Difference Formulas

Name: Date: May 29, 2013

P 7. Find the exact value of

(a) $\cos\left(\frac{7\pi}{12}\right)$

(b) $\cos\frac{\pi}{4} + \cos\frac{\pi}{3}$

P 43. Find the exact value of $\sin(u + v)$ given that $\sin u = \frac{5}{13}$ and $\cos v = \frac{-3}{5}$.

P 53. Find the exact value of $\tan(u - v)$ given that $\sin u = \frac{-7}{25}$ and $\cos v = \frac{-4}{5}$. (Both u and v are in Quadrant III.)

P 75. Find all solutions to
$$\sin(x + \pi) - \sin x + 1 - 0$$
on the interval $[0, 2\pi)$.

P 83. Find all solutions to
$$\sin\left(x + \frac{\pi}{2}\right) - \cos^2 x = 0.$$