

**Composite Identities**

Mr Murphy

Name \_\_\_\_\_

***A.M.D.G.***

$$\cos A = -\frac{7}{25} \text{ in Quadrant III, } \sin P = -\frac{15}{17} \text{ in Quadrant IV, } \tan B = -\sqrt{3} \text{ in Quadrant II}$$

Use the above information to answer problems 1 and 2

1) Find the value of  $\cos(A + P)$ 2) Find the value of  $\sin(P - A)$ 3) Find the value of  $\sin(A - P)$ 4) Find the value of  $\cos(A - B)$

5) Find the two possible solutions for  $0 \leq x \leq 360^\circ$

a)  $\sin 30 \cos 4x - \cos 30 \sin 4x = \frac{\sqrt{2}}{2}$

b)  $\cos 5\theta \cos 15 + \sin 5\theta \sin 15 = -\frac{1}{2}$

c)  $\sin 2\theta \cos 10 + \cos 2\theta \sin 10 = -\frac{\sqrt{3}}{2}$