**UNIT 3B – HW 4**  NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*The following points are on the terminal side of an angle in standard position. Determine the exact values of the six trig functions of the angle.*

1. ( - 9, - 40) 2. (8, - 15)

*State the quadrant in which θ must lie:*

3. sin *θ < 0 and cos θ < 0 4. sin θ > 0 and cos θ > 0 5. sin θ > 0 and tan θ > 0*

*6. sec θ > 0 and csc θ > 0 7. sin θ < 0 and sec θ > 0*

*Find the values for the six trigonometric functions of θ for the functional value and given constraint:*

*8. tan θ =* $\frac{-15}{8}$*, sin θ < 0*

*9. Cos θ =* $\frac{15}{17}$*, tan θ <0*

*10. cot θ = - 3, cos θ > 0*