Name_____

Date_____

Unit 9: Solving Trig Equations- Assignment #16

(No manipulation) Just using the first quadrant values to find your answer.

1) Sin Θ= $\frac{\sqrt{2}}{2}$ domain 90 < θ<180

Solution: So where is the sin $\frac{\sqrt{2}}{2}$? If you know your first quadrant values you know that is at the 45. However, my answer needs to be in the second quadrant according to the domain. So I know in the second quadrant a reference angle of 45 is 135°. **So** $\emptyset = \mathbf{135°}$

2) cos θ = -1 domain 90 $\leq$ θ $\leq$ 180

3) cos θ = -.5 domain 90$\leq$ θ $\leq$ 180

4) sin θ = -.5   domain 180 $\leq$ θ $\leq$ 360

5) cos θ = $\frac{\sqrt{2}}{2}$ domain 180 $\leq$ θ $\leq$ 360

6) sin θ = $\frac{\sqrt{3}}{2}$ domain 0 $\leq$ θ $\leq$180

7) tan θ = $\frac{\sqrt{3}}{1}$ domain 180 $\leq$ θ $\leq$ 360

8) tan θ = -1   domain 180 $\leq$ θ $\leq$ 360