T-5 Worksheet Name_____

The terminal side of an angle θ, in standard position passes through the given point. Sketch the angle and evaluate $sin\theta$ and $tan\theta$. Then find the value for θ for $0^o < \theta < 360^o$.

1. $(-\frac{\sqrt{3}}{2}, -\frac{1}{2})$

2. $(-\frac{1}{2}, \frac{\sqrt{3}}{2})$

θ is in standard position with **P** on the terminal side. **r** is the distance from (0,0) to **P**. Find the (x,y) coordinates of **P**.

3. $\theta=30^o$, r=4

4. $\theta=300^o$, r=4

5. $\theta=135^o$, $r=4\sqrt{2}$

6. Two lighthouses at points A and B are 40 km apart. Each has a visual contact with a freighter at point C. If $m\angle CAB = 20°30'$ and the $\angle CBA = 115°$, how far is the freighter from A?