Name $\qquad$ Student Number $\qquad$
Show all work. Label your answers clearly.

1. (2 points) Find two possible values for $\theta$, other than $\frac{5 \pi}{7}$, given that $\sin (\theta)=\sin \left(\frac{5 \pi}{7}\right)$. Give an exact answer.
2. (4 points) Audrey and Andy went kite-flying. Audrey is holding the kite string 4 feet off the ground, and the kite string makes an angle of 42 degrees with the level ground. Andy is standing directly beneath the kite and is 212 feet from Audrey. How high is the kite above the ground?
3. (4 points) Betty the ladybug is sitting on the tip of an hour hand on the face of a clock. The hour hand is 6 inches long. Placing the origin of a coordinate system at the center of the clock's face, what are Betty's $x$ and $y$ coordinates at 5:30?
