Quiz 6

1. Wires are anchoring a satellite tower as shown in the picture. The distance between where the bottom wire attaches to the tower and where the top wire attaches to the tower is 100 feet. Both wires are fastened to the ground at the same point. The bottom wire makes an angle of 60° with the tower and the top wire makes an angle of 30°. Find the distance between the base of the tower and where the wires are anchored.

2. Accurately graph the function $z = \cos(\theta)$ on the domain $-2\pi \leq \theta \leq 2\pi$. Make sure to label the axes, and include the correct zeros, relative minima, and relative maxima.