

Written HW4 – MATH 1540 Spring 2023

1. A ladder leans against a vertical wall, making a  $72^\circ$  angle with the ground. If the bottom of the ladder is 5 feet from the wall, then how long is the ladder?
2. A building has an antenna and you are standing 150 feet away from it. From where you are standing, you measure the angle of elevation to the top of the building (not including the antenna) to be  $17^\circ$  and the angle of elevation to the top of the antenna to be  $20^\circ$ . How tall is the antenna?