

CW/HW Ch8 D6: Angles of Depression and Angles of Elevation

1. Label each angle as an angle of depression or angle of elevation.

$\sphericalangle 1$: _____

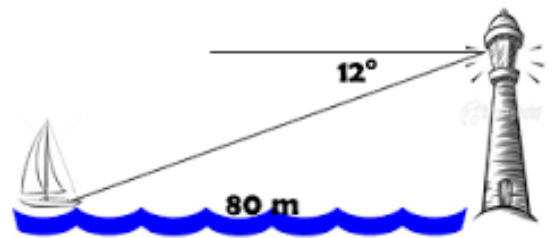
$\sphericalangle 2$: _____

$\sphericalangle 3$: _____

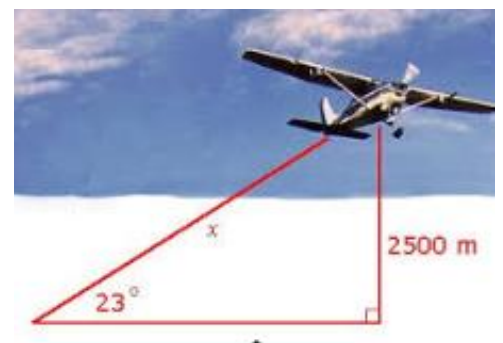
$\sphericalangle 4$: _____



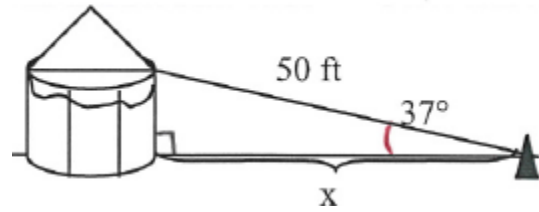
2. Given the information in the diagram below, find the height of the lighthouse to the nearest tenth of a meter.



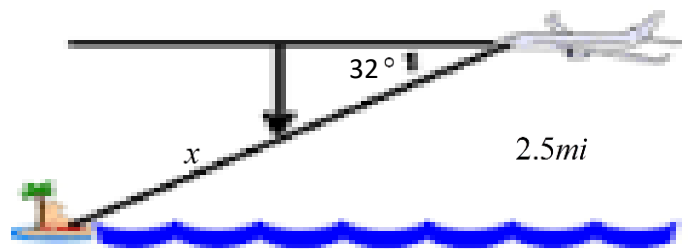
3. Harrison Ford is flying his plane and has lifted off the ground at an angle of elevation of 23° and has reached an altitude of $2500m$. Determine how far he has flown to the nearest meter.



4. If a 50 ft cable supporting a circus tent is staked into the ground at an angle of elevation of 37° , how far from the tent must the stake be placed?



5. An airplane is flying at an altitude of 2.5 miles when it sees a person stranded on an island at an angle of depression of 32° . How far away is the plane from the island (to the nearest mile)?



6. In the diagram below, find the angle of elevation to the nearest degree.

