

Ex) An observer stands 150 ft. away from a building. His eye level is 6 ft above the ground. From his eye level, he measures the angle of elevation to the top of the building to be  $53^\circ$ . Find the height of the building. Round to nearest foot.



Ex) A smaller building standing 30 feet tall is a short distance away from a taller building. Two measurements are made from the top right corner of the smaller building:

- the angle of elevation to the top left corner of the taller building is  $32^\circ$
- the angle of depression to the bottom left corner of the taller building is  $19^\circ$

Find the height of the taller building. Round your answer to the nearest foot.

