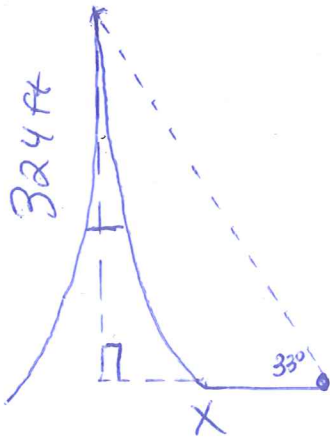


**Geometry 7.5 WORKSHEET - Angles of Elevation and Depression**

Round all distances to nearest tenth, and all angles to nearest degree.

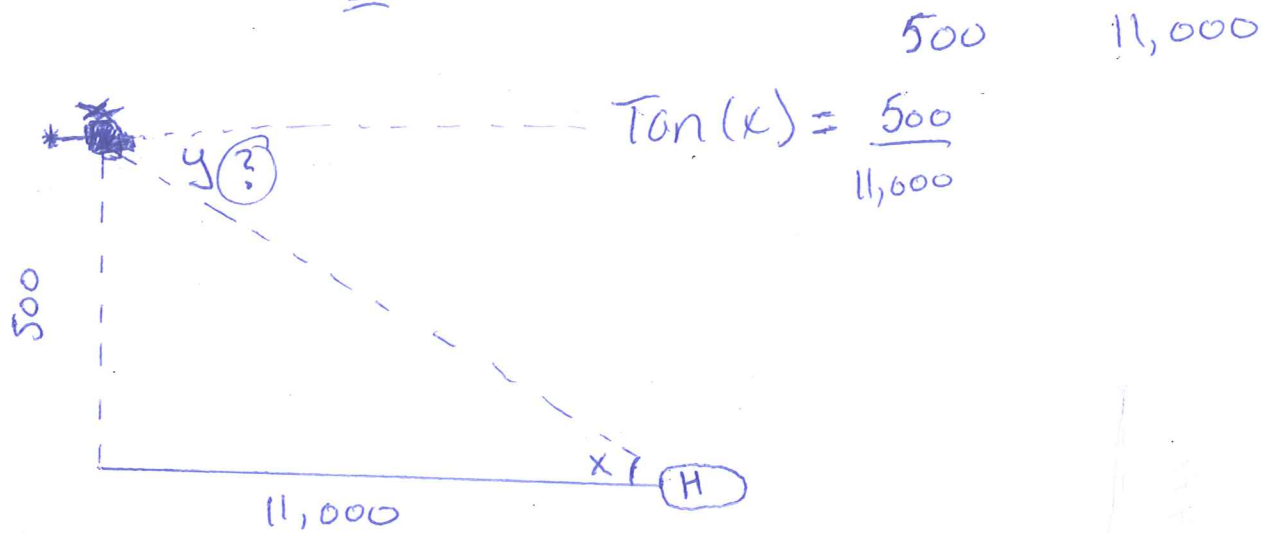
1. Pierre is standing at ground level with the base of the Eiffel Tower in Paris. The angle formed by the ground and the top of the tower is  $33^\circ$ . The height of the Eiffel Tower is approximately 324 meters. Find Pierre's distance from the Eiffel Tower.



2. Michaela Rae is observing the Old Faithful geyser at Yellowstone park as its eruption rises 175 feet in the air. Michaela's line of sight to the top of the eruption is 200 feet. What is the angle of elevation?



3. After flying at an altitude of 500 meters, a helicopter starts to descend when its ground distance from the landing pad is 11 kilometers. What is the angle of depression for this part of the flight?



4. Two boats are observed by a parasailer 75 meters above a lake. The angles of depression are  $13^\circ$  and  $7^\circ$ . How far apart are the boats (to the nearest tenth)?

Hint example (3) from Notes

