	orenticeship Math 12 SIGNMENT: Angles of I	Elevation and Depression	Name: Date:	
Draw a sketch for each problem. Round all answers to the nearest tenth.				
1.	A man flies a kite with a 100 52°. How high off the ground		angle of elevation	of the string is
2.	From the top of a vertical clit level with the base of the clit			
3.	An airplane takes off 200 ya elevation must the plane tak Assume that the airplane fliconstant until the airplane fli Remember: 1 yard = 3 feet	te off in order to avoid es in a straight line and les over the building.	crashing into the	building?

4. A 14 foot ladder is used to scale a 13 foot wall. At what angle of elevation must the ladder be situated in order to reach the top of the wall?

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5. A person stands at the window of a building so that his eyes are 12.6 m above the level ground. An object is on the ground a horizontal distance of 58.5 m away from the building. Compute the angle of depression of the person's line of sight to the object on the ground.

6. A ramp is needed to allow vehicles to climb a 2 foot wall. The angle of elevation in order for the vehicles to safely go up must be 30 ° or less, and the longest ramp available is 5 feet long. Can this ramp be used safely?

7. Roof trusses often use right triangles to make a flimsy 2 x 4 more rigid to hold up the weight of the roof. If a house is 40 feet wide and the roof is an isosceles triangle with base angles of 30°, how far is it from the bottom edge of the roof to the peak?

8. You are 6 feet tall and you spot a cat up in a tree. When you are 25 feet from the tree, the angle of elevation from your eyes to the cat is 45°. How high off the ground is the cat?

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