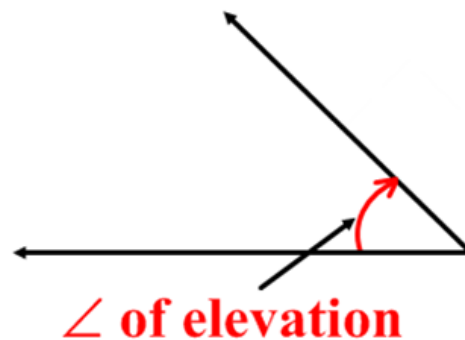


## Def. $\angle$ of Elevation

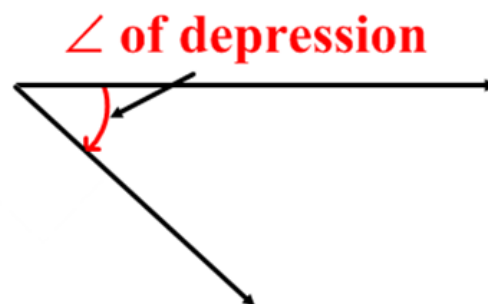
An  $\angle$  formed by a horizontal line **up** to the line of sight of an object.

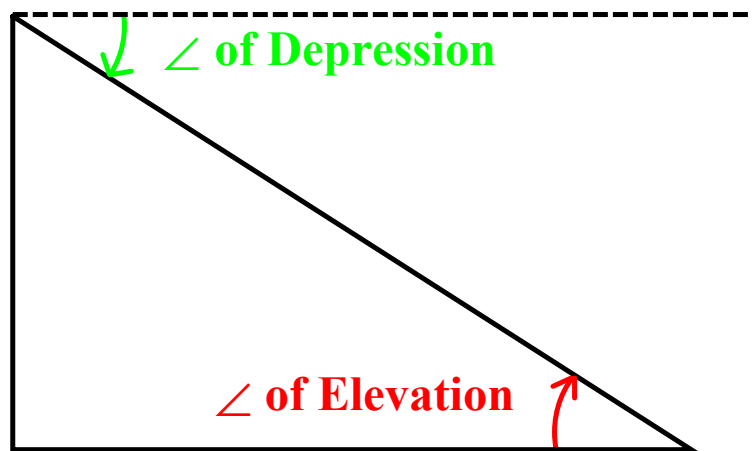


## Def. $\angle$ of Depression

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An  $\angle$  formed by a horizontal line **down** to the line of sight of an object.





Two friends, Adam and Bob, are flying a kite in the park. They both attach a string to the same kite. Adam has 74.3 feet of string and Bob has 87.9 feet of string. After boys have let out all of their string they attach each end to the ground so that the kite is in between the 2 boys. If the angle of depression from the kite to point where Adam's string is attached is  $67.7^\circ$  and the angle of elevation from the ground to the kite from Bob's point on the ground is  $49.9^\circ$ , find the distance between the two ends of the string that are attached to the ground. (Assume the strings are drawn tight)