

8 - 5

Angle of Elevation and Depression

ELEVATION (inside the right triangle)

Angles that are typically formed with the ground and the Hypotenuse

DEPRESSION (outside the right triangle)

Angles that are typically formed with the line of sight and the Hypotenuse.

Sydney (about 5ft tall) is walking through a forest looking for dinner. She sees a crow in a tree about 40ft high. Sydney pulls out her bow and arrow to shoot the crow. She elevates the bow, from her line of sight at about 35 degrees. How far away is Sydney from the base of the tree?

Hunter is laying down on a cliff, 100ft high, looking for his dinner. He sees a rabbit below and pulls out his shotgun. The rabbit is located 60ft from the bottom of the cliff. At what angle of Depression must Hunter lower his gun to kill the rabbit so he can eat?