# 3.2 Sine and Cosine Ratio Extra Examples 

## Definitions:

Angle of Elevation: the angle between the line of sight and the horizontal line when the observer is looking upward.

Angle of Depression: the angle between the line of sight and the horizontal line when the observer is looking downward.
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1. John and Sam were passing their soccer ball back and forth. However, John had noticed there was a bird above Sam's head. Where John was standing, the bird was at an angle of elevation of $50^{\circ}$. The bird was also at a distance of 5.2 m from John. At what altitude was the bird above Sam?
2. Calculate the length of DF to the nearest tenth of a cm.

