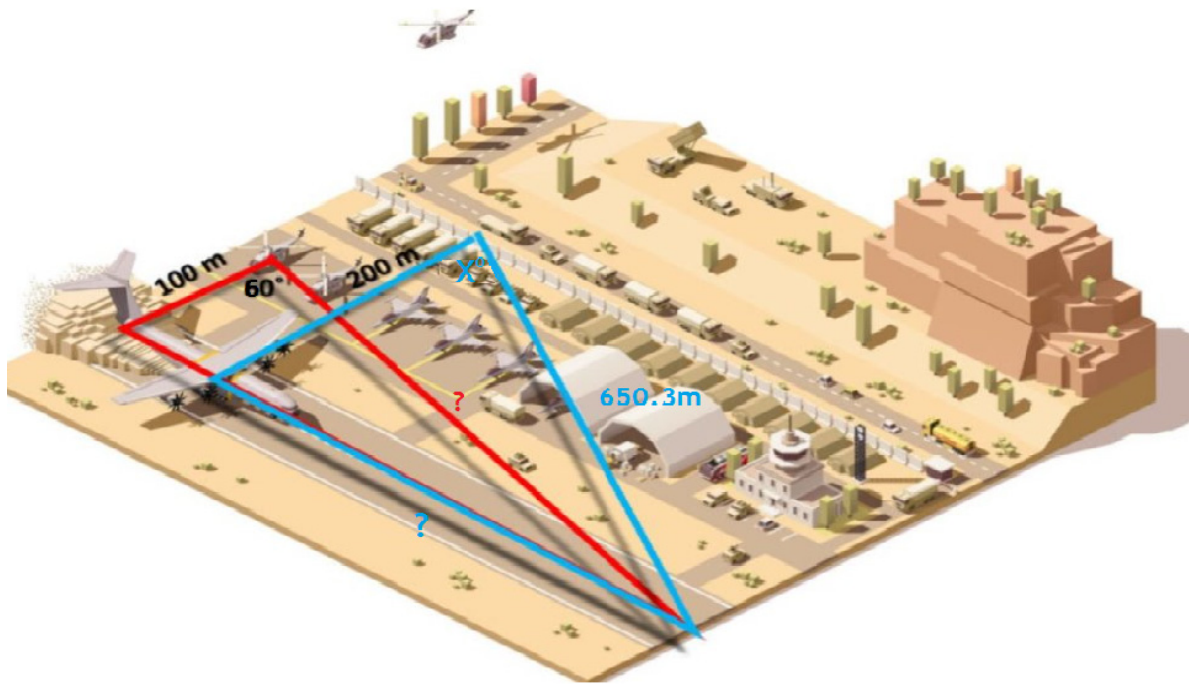


Runaway Plane Worksheet

The Scenario

You are the crack security team leader at a covert base in a top secret location. You've almost finished your shift when you spy the prop plane accelerating down the runway without a pilot, out of control. You've got until the end of the runway to intercept the plane and smash your way into the cockpit to stop it before it takes off by itself!



Question 1 (4 marks)

Find the angle **X** if the distance between the track and the prop plane is 200 m and the distance between your location on the track and the end of the runway is 650.3 m.

Question 2 (2 marks)

Find the distance that prop plane will travel until the team leader intercepts it (at the end of the runway).

Question 3 (4 marks)

The distance between the prop plane and the helicopter is 100 m. The angle, where the length between the prop plane and the helicopter and the length from the helicopter to the end of the runway intersect, is 60 degrees. Find the distance that helicopter has to travel to the end point of the runway.