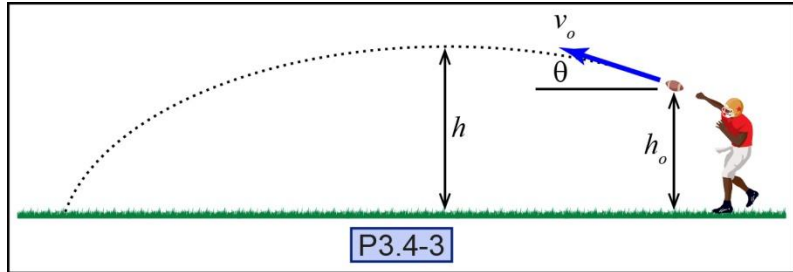**P3.4-3)** A quarterback throws a football with an initial velocity of 40 mph at an angle of 30° relative to the horizontal. If the height of the football relative to the ground as it leaves the quarterback's hand is h_o = 5 ft, determine the maximum attained height (h) of the football.

P3.4-3

Given:

Find:

Solution:

Calculate the height.

Use one of the projectile equations to calculate the maximum height of the football.

$h = $ _____