

• In class assignment (Make-up)

There are 3 objects: T, P1 and P2. T is the target. Pursuers P1 and P2 both are chasing T.

You have to simulate the chasing for a total of 50 seconds (excluding the initial position)

Motion of T:

$$X(t) = 50 - t$$

$$Y(t) = 10 \sin(t/10)$$

Sampling (x,y) for target T at each second will suffice. (t = 0 to t = 50)

Motion of P1 and P2:

Both of them are chasing target T.

Initial position of P1: (0,60) Speed of P1: 1.5 m/s

Initial position of P2: (60,60) Speed of P2: 1.8 m/s

Requirements:

1. Print the final coordinates of all three objects. (At t = 50)
2. Draw a graph showing the paths of the objects with proper labeling