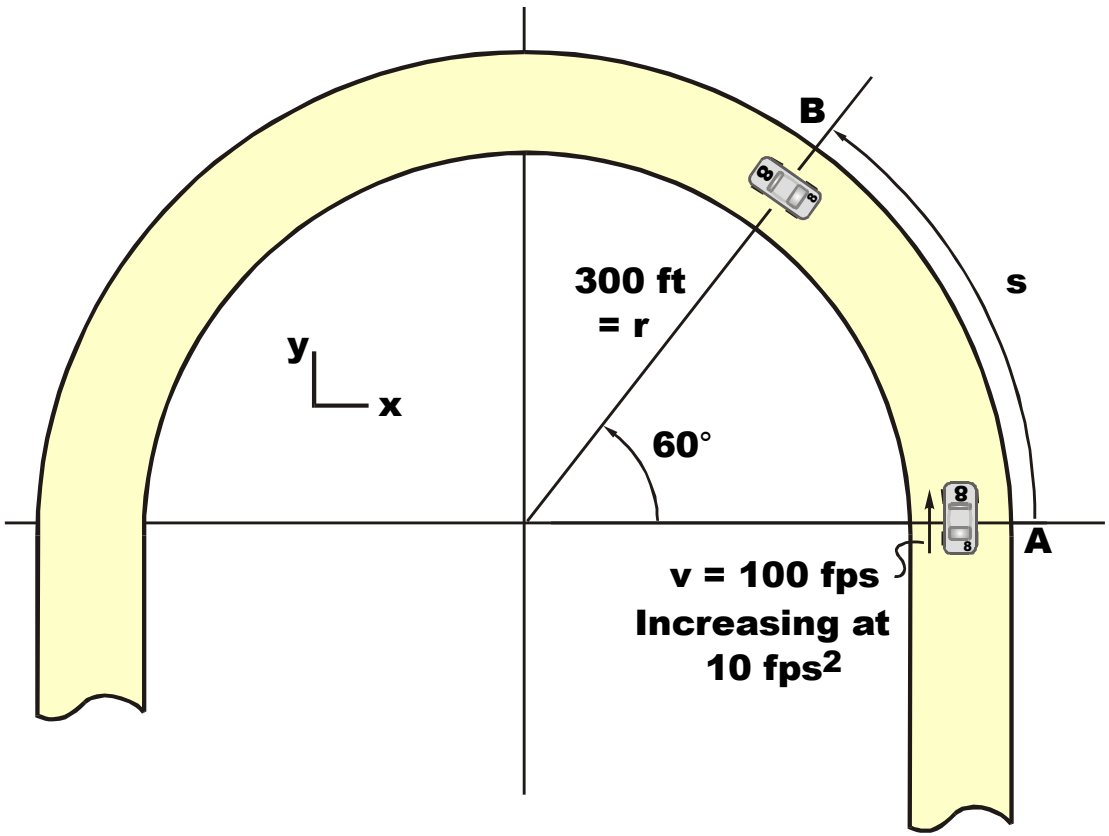
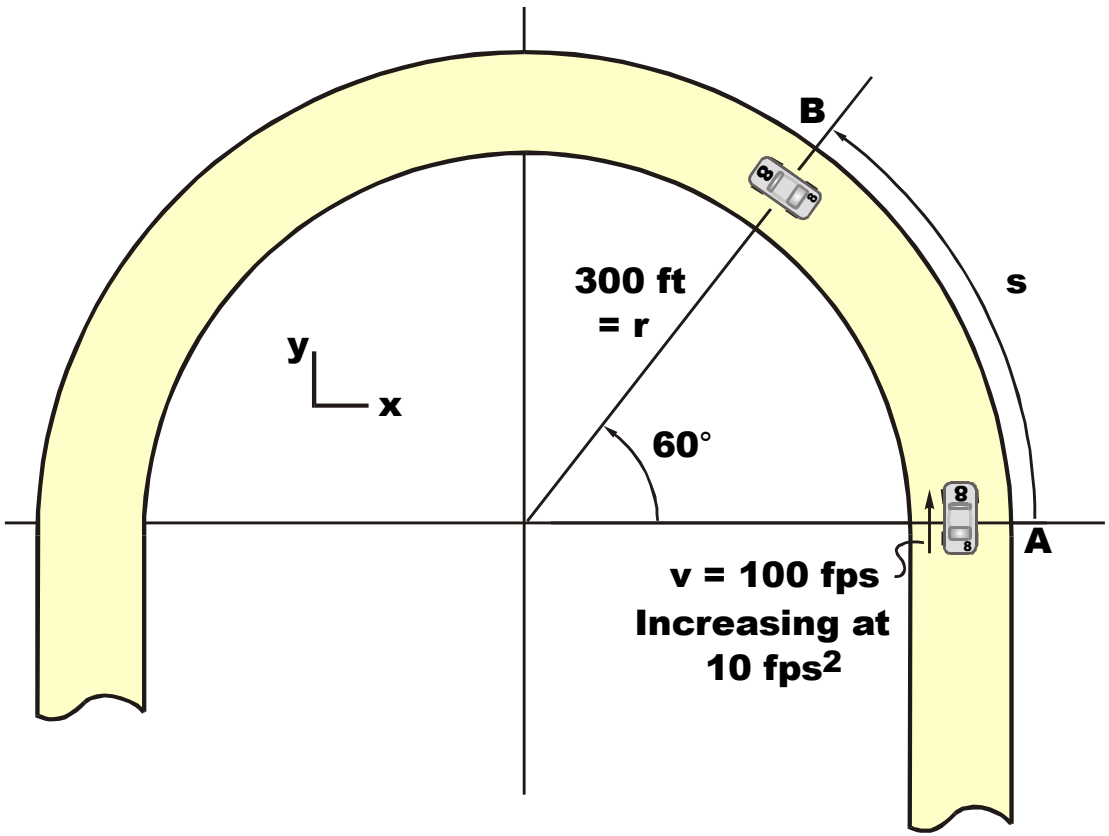
1. (25 points) After a race restart, a stock car enters a circular curve with a speed of 100 fps, increasing at 10 fps^2. When the car is 60º into the curve, please write, for the car: (as polar or Cartesian vectors)

(a) The velocity vector, v.

(b) The acceleration vector, a.




B
s
300 ft
= r
y
x
60°
A
v = 100 fps
Increasing at
10 fps2