Show all work for full credit (do not merely read a solution from a graph on your calculator, for instance).

1. (5 points) Find the horizontal and vertical asymptotes, if any, of the following rational function.

   \[ f(x) = \frac{3x - 1}{x^2 + 4x + 3} \]

2. (5 points) A horse is running around a circular track at 10.34 meters per second. The track has a radius of 120 meters. Find the angular speed of the horse in degrees per second.