1. (5 points) A long-playing record (LP) has a 12 inch diameter and rotates with a constant angular speed of $33\frac{1}{3}$ RPM (that’s “thirty-three and a third”).

   (a) What is the angular speed of the record in radians per minute?

   (b) What is the linear speed of a point on the outer edge of the record?
2. (5 points) A merry-go-round is rotating at the constant angular speed of 5 RPM counterclockwise. The platform of the ride is a circular disk of radius 28 feet. Impose a coordinate system so that the center of the merry-go-round is at the origin. You jump onto the edge of the ride at a point on the positive $y$-axis. Give the $x$ and $y$ coordinates of your position after 50 seconds.