If coordinates of the center of the circle are (x_0, y_0) and radius of the circle is R then equation of the circle is the following:

$$(x - x_0)^2 + (y - y_0)^2 = R^2$$

In our case:

$$x_0 = \frac{3}{5}$$

$$y_0 = \frac{1}{3}$$

$$R = \sqrt{10}$$

Substituting this into circle equation we get:

$$\left(x - \frac{3}{5}\right)^2 + \left(y - \frac{1}{3}\right)^2 = \sqrt{10}^2$$

Simplifying:

$$\left(x - \frac{3}{5}\right)^2 + \left(y - \frac{1}{3}\right)^2 = 10$$