8.1 (part 2) #29-350dd, 37-40, 45-52, 55-58, 63 see bright sheet for identifies and unit circle

CHECK EVEN ANSWERS #38,40,46,48,50,52,56,58

$$\begin{pmatrix} 2\sqrt{2}, \frac{7\pi}{6} \end{pmatrix} \qquad \begin{pmatrix} 6, \frac{11\pi}{6} \end{pmatrix}$$
$$r = 5\csc\theta \qquad r = 3 \qquad r^2 = \sec 2\theta$$
$$(x - 3)^2 + y^2 = 9 \qquad y = 2 \qquad x^2 + y^2 = 9$$

<u>Hints:</u>

- #50 → substitute for x, substitute for y, apply exponents, factor, then see bright Identities sheet (Double Angle substitution)
- #57,58 \rightarrow substitute, gather like terms, set = 0, then complete the square to create an equation of a circle

Reminder from yesterday's notes:

$$\begin{array}{ll} \mathbf{x} = \mathbf{r}\mathbf{cos}\theta & \mathbf{r}^2 = \mathbf{x}^2 + \mathbf{y}^2 \\ \mathbf{y} = \mathbf{r}\mathbf{sin}\theta & \mathbf{r} = \sqrt{\mathbf{x}^2 + \mathbf{y}^2} & \tan\theta = \frac{\mathbf{y}}{\mathbf{x}} \end{array}$$