

$$\#9 \quad x^2 + y^2 + 7x + 9y + \frac{49}{4} = 0$$

$$\textcircled{2} \quad x^2 + 7x + y^2 + 9y = -\frac{49}{4}$$

$$\left(7 \cdot \frac{1}{2}\right)^2$$

$$\left(9 \cdot \frac{1}{2}\right)^2$$

$$\textcircled{3} \quad x^2 + 7x + \frac{49}{4} + y^2 + 9y + \frac{81}{4} = -\frac{49}{4} + \frac{49}{4} + \frac{81}{4}$$

$$\left(\frac{7}{2}\right)^2$$

$$\left(\frac{9}{2}\right)^2$$

$$\left(x + \frac{7}{2}\right)^2 + \left(y + \frac{9}{2}\right)^2 = \frac{81}{4}$$

$$h = -\frac{7}{2}$$

$$k = -\frac{9}{2}$$

$$r = \sqrt{\frac{81}{4}}$$
$$= \sqrt{\frac{9}{2} \cdot \frac{9}{2}}$$
$$= \frac{9}{2}$$

$$C: \left(-\frac{7}{2}, -\frac{9}{2}\right)$$
$$r = \frac{9}{2}$$