

Finding Different Polar Coordinates for Same Point

Name _____

Date _____ Period _____

Plot the following polar coordinates

$$(4, \frac{\pi}{6})$$

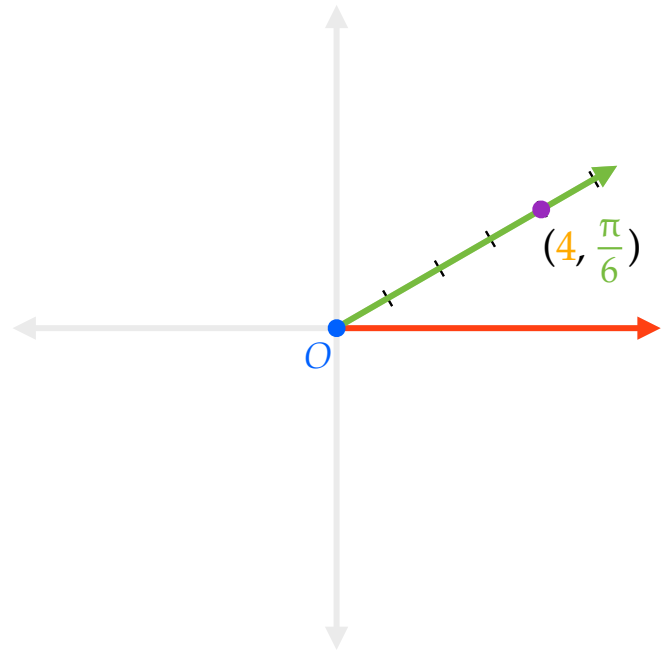
$$r = 4 \quad \theta = \frac{\pi}{6}$$

Find three polar coordinates for this point

$$r > 0, 2\pi < \theta < 4\pi$$

$$r > 0, -2\pi < \theta < 0$$

$$r < 0, 0 < \theta < 2\pi$$



Plot the following polar coordinates

$$(3, \frac{4\pi}{3})$$

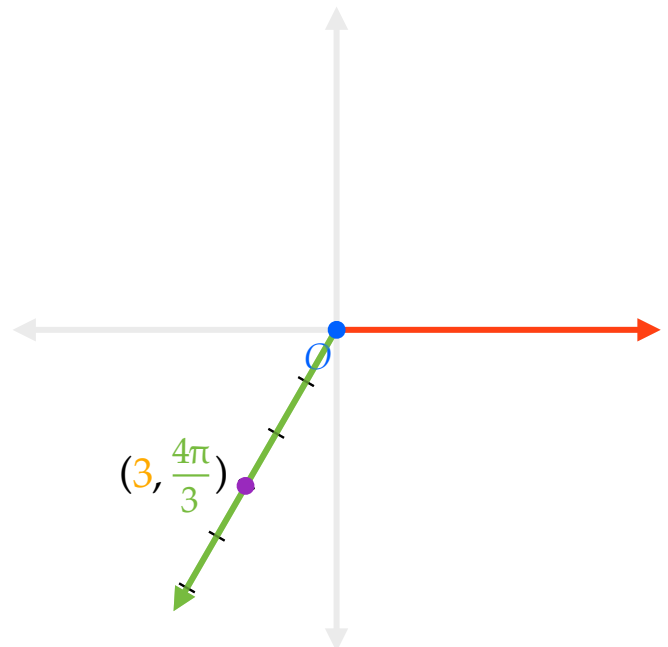
$$r = 3 \quad \theta = \frac{4\pi}{3}$$

Find three polar coordinates for this point

$$r > 0, 2\pi < \theta < 4\pi$$

$$r > 0, -2\pi < \theta < 0$$

$$r < 0, 0 < \theta < 2\pi$$



Plot the following polar coordinates

$$\left(2, \frac{\pi}{2}\right)$$
$$r = 2 \quad \theta = \frac{\pi}{2}$$

Find three polar coordinates for this point

$$r > 0, 2\pi < \theta < 4\pi$$

$$r > 0, -2\pi < \theta < 0$$

$$r < 0, 0 < \theta < 2\pi$$

