

For #1-3 use the following polar coordinates

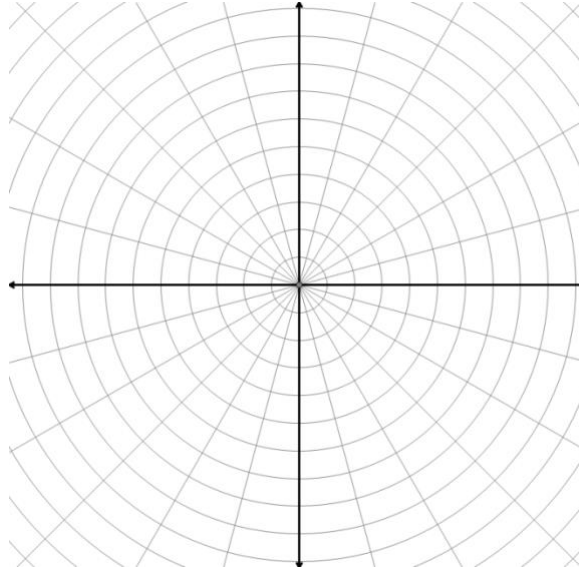
A. $\left(3, \frac{2\pi}{3}\right)$

B. $\left(-5, \frac{-17\pi}{6}\right)$

C. $\left(2, \frac{-3\pi}{4}\right)$

D. $\left(-2, \frac{\pi}{2}\right)$

1. Plot the polar coordinates



2. For each of the points above, find 2 other coordinates that represent the same point, one with $r > 0$ and the other $r < 0$

A.

B.

C.

D.

3. State the rectangular coordinates.

A.

B.

C.

D.

4. Convert the rectangular coordinates into polar coordinates:

$(3\sqrt{3}, -3)$

5. Convert the following equations into their polar form.

a) $x^2 + y^2 = 16$

b) $y^2 = 3x$

c) $y = 3$

d) $x = 7$

6. Convert the following equations from polar form into rectangular form.

$r = 6$

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