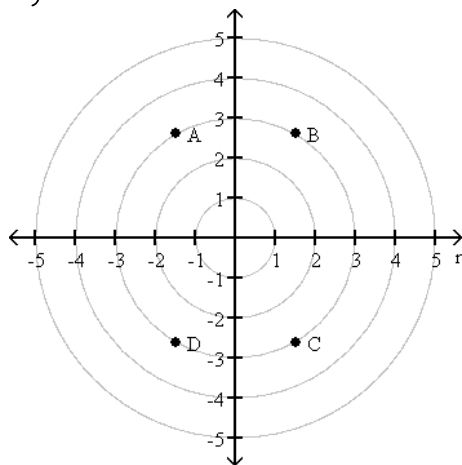


Match the point in polar coordinates with either A, B, C, or D on the graph.

1)  $\left(-3, \frac{\pi}{3}\right)$

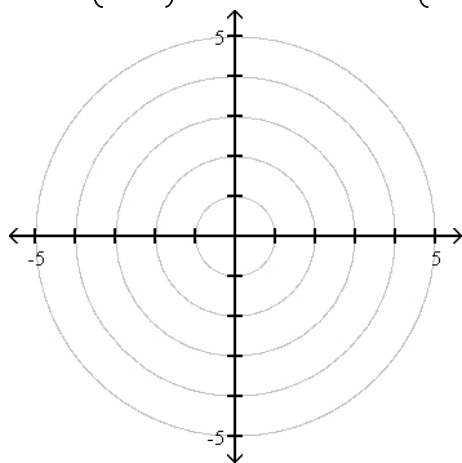
1) \_\_\_\_\_



Plot the points given in polar coordinates.

2) A:  $\left(4, \frac{5\pi}{4}\right)$  B:  $(-2, 45^\circ)$  C:  $\left(-3, -\frac{\pi}{4}\right)$

2) \_\_\_\_\_

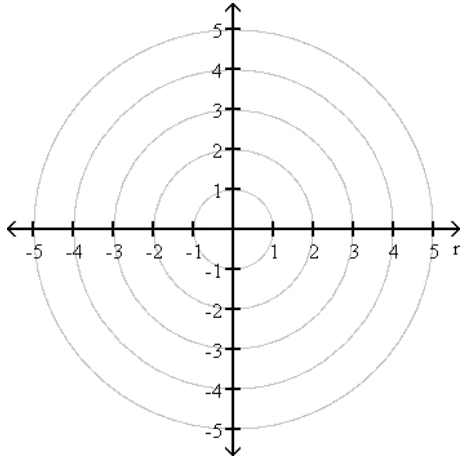


Solve the problem.

3) Plot the point  $\left(4, \frac{\pi}{6}\right)$  and find other polar coordinates  $(r, \theta)$  of the point for which:

3) \_\_\_\_\_

- (a)  $r > 0, -2\pi \leq \theta < 0$
- (b)  $r < 0, 0 \leq \theta < 2\pi$
- (c)  $r > 0, 2\pi \leq \theta < 4\pi$



The polar coordinates of a point are given. Find the rectangular coordinates of the point.

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

4) \_\_\_\_\_

- A)  $\left(\frac{3\sqrt{2}}{2}, \frac{-3\sqrt{2}}{2}\right)$
- B)  $\left(\frac{-3\sqrt{2}}{2}, \frac{3\sqrt{2}}{2}\right)$
- C)  $\left(\frac{3\sqrt{2}}{2}, \frac{3\sqrt{2}}{2}\right)$
- D)  $\left(\frac{-3\sqrt{2}}{2}, \frac{-3\sqrt{2}}{2}\right)$

5)  $(-3, -135^\circ)$

5) \_\_\_\_\_

- A)  $\left(\frac{3\sqrt{2}}{2}, \frac{3\sqrt{2}}{2}\right)$
- B)  $\left(\frac{-3\sqrt{2}}{2}, \frac{3\sqrt{2}}{2}\right)$
- C)  $\left(\frac{-3\sqrt{2}}{2}, \frac{-3\sqrt{2}}{2}\right)$
- D)  $\left(\frac{3\sqrt{2}}{2}, \frac{-3\sqrt{2}}{2}\right)$

The rectangular coordinates of a point are given. Find polar coordinates for the point.

6)  $(-4, 4)$

6) \_\_\_\_\_

- A)  $\left(4\sqrt{2}, -\frac{3\pi}{4}\right)$
- B)  $\left(4\sqrt{2}, \frac{3\pi}{4}\right)$
- C)  $\left(-4\sqrt{2}, -\frac{3\pi}{4}\right)$
- D)  $\left(-4\sqrt{2}, \frac{\pi}{4}\right)$

Some answers: 1) D 4) A 5) A 6) B