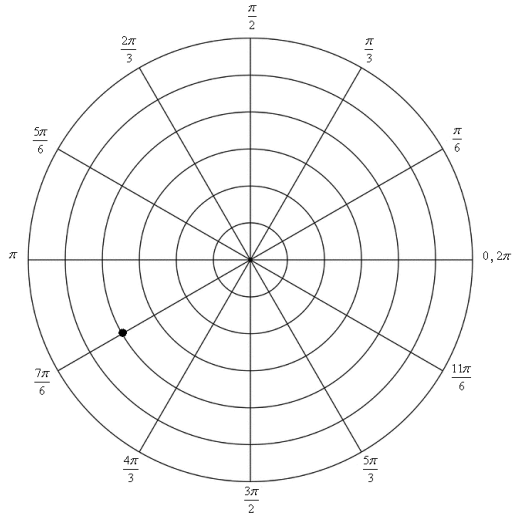


Polar Coordinates

1) Find 5 different ways to express the following using polar coordinates.



A

B

C

D

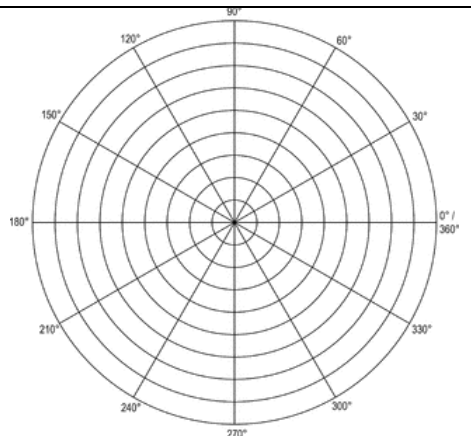
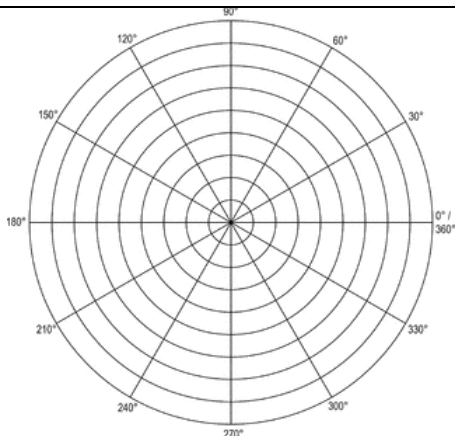
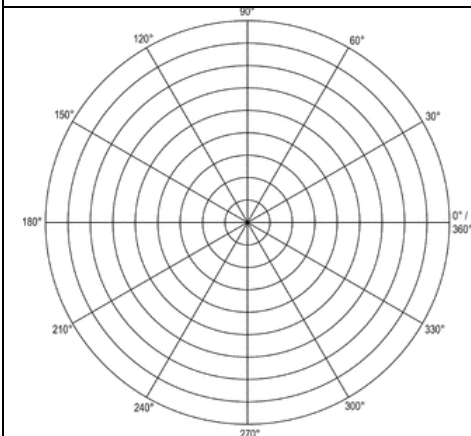
E

Plot the following polar coordinates.

2. $(-4, 30^\circ)$

3 $\left(5, \frac{3\pi}{4}\right)$

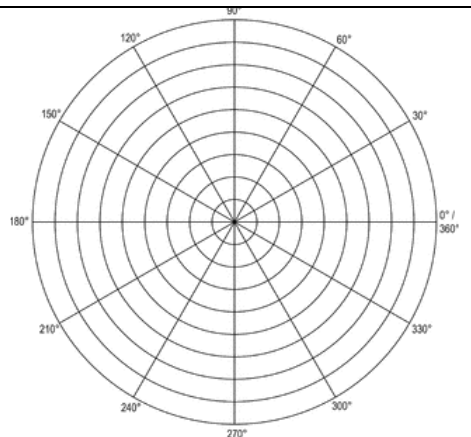
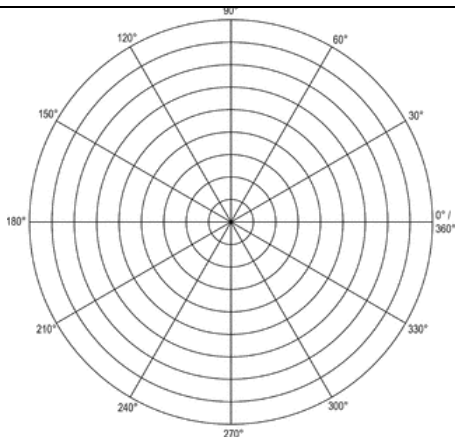
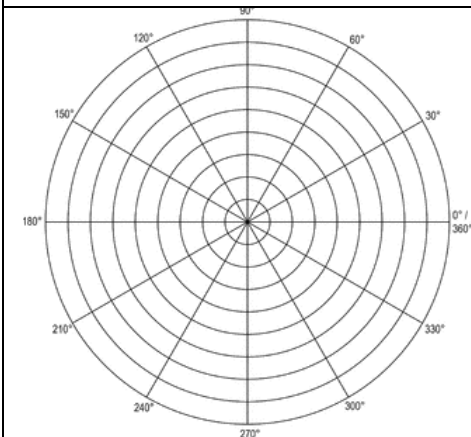
4. $(3, -120^\circ)$



5. $\left(-6, -\frac{7\pi}{6}\right)$

6. $\left(-4, \frac{17\pi}{3}\right)$

7. $\left(6, -\frac{37\pi}{3}\right)$



Convert the following rectangular coordinates to polar form. (Angles may be in degrees or radians)

8. $(-5, -5)$

9. $(4\sqrt{3}, 4)$

10. $(0, -3)$

11. $(\sqrt{3}, -1)$

12. $\left(-\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$

13. $(-2, 2\sqrt{3})$

14. $\left(\frac{5\sqrt{3}}{2}, -\frac{5}{2}\right)$

15. $(3\sqrt{2}, -3\sqrt{2})$

Convert the following Polar Coordinates to Rectangular Form.

16. $\left(3, \frac{\pi}{6}\right)$

17. $(5\sqrt{2}, -135^\circ)$

18. $(-4, 450^\circ)$

19. $\left(-2, \frac{11\pi}{6}\right)$

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

21. $(3, -870^\circ)$

22. $(-12, 0^\circ)$

23. $\left(\sqrt{6}, \frac{\pi}{3}\right)$