

Ch. 16 - BOARD PROBLEMS

1) WRITE THE QUADRATIC EQUATION.

2) WHAT ARE THE SOLUTIONS TO:

$$y = -9(x+9)^2 - 2$$

3) WRITE THE VERTEX FORM OF THE QUADRATIC EQUATION?

4) write in vertex form.

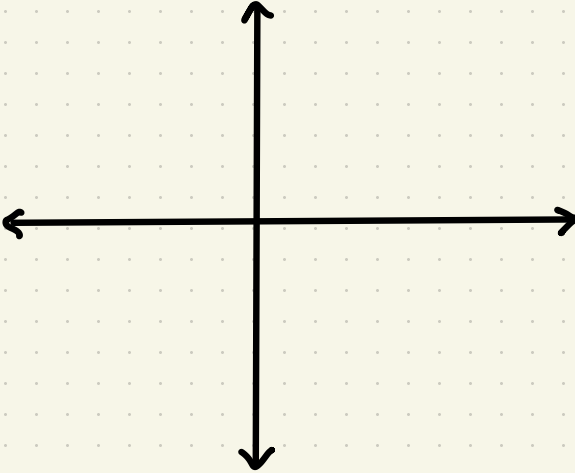
$$y = x^2 + 10x + 33$$

5) FACTOR By Grouping.

$$5n^3 - 10n^2 + 3n - 6$$

Ch. 16 - POLAR & RECTANGULAR COORDINATES

1. PLOT POLAR COORDINATES $(6, 30^\circ)$,
CHANGE TO RECTANGULAR COORDINATES.



2. PLOT $(7, -135^\circ)$, CHANGE TO RECTANGULAR COORDINATES.

PRACTICE PROBLEMS 1 & 2

PLOT POLAR COORDINATES.

1. $(5, 225^\circ)$

2. $(3, 120^\circ)$

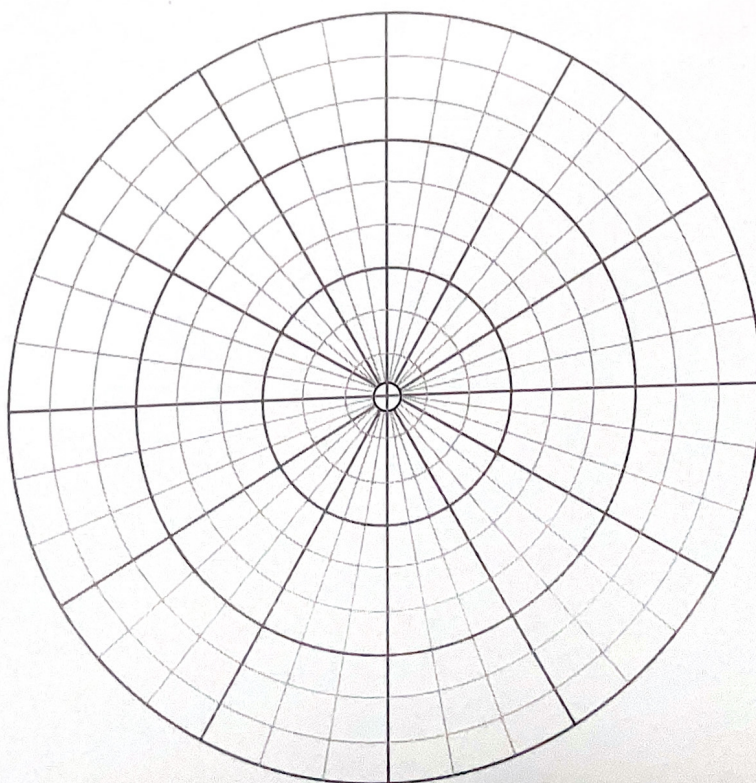
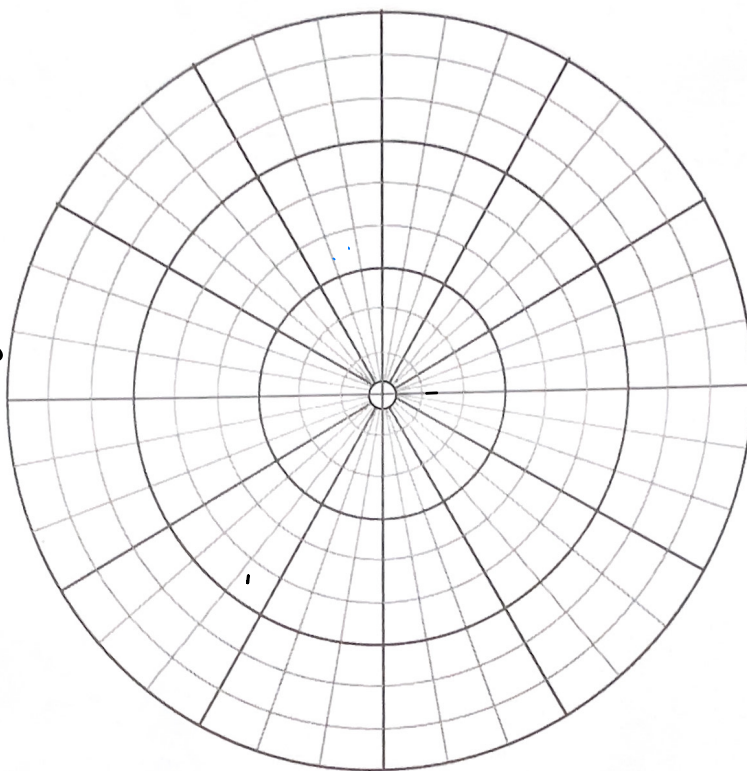
3. $(4, -45^\circ)$

GIVEN 1-3 IN
RECTANGULAR
COORDINATES

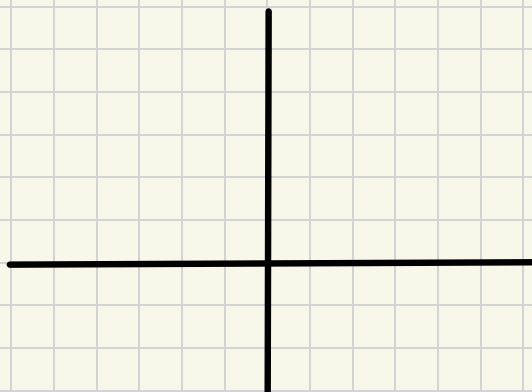
4.

5.

6.

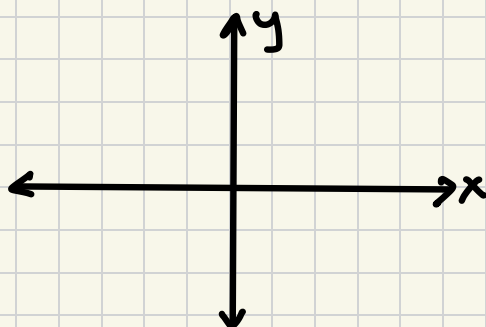


EX. 2 CHANGE $(5, 5)$ TO POLAR COORDINATES



EX. 3

LIST 4 DIFFERENT WAYS OF EXPRESSING
POLAR COORDINATES $(-5, -37^\circ)$; change to rectangular
coordinates.



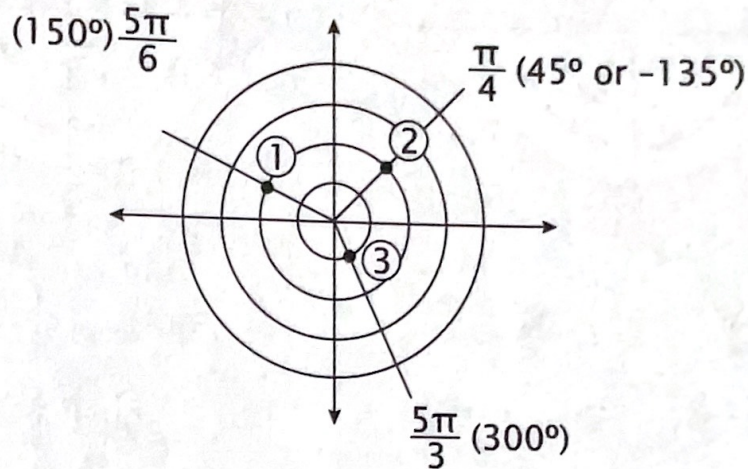
Example 5

Plot these polar coordinates.

1. $(2, 150^\circ)$

2. $(-2, -3\pi/4)$

3. $(1, 300^\circ)$



Practice Problems 3

Plot these polar coordinates and give at least three more ways of describing them, employing degrees and radian measure.

1. $(3, 30^\circ)$

2. $(-1, 60^\circ)$

3. $(4, -\pi/4)$

4. $(-2, -2\pi/3)$

Change the polar coordinates to rectangular coordinates.

5. $(2, \pi/6)$

6. $(3, -\pi/4)$

7. $(\sqrt{2}, 60^\circ)$

8. $(-4, 315^\circ)$

Do the reverse of #5-8. Change the rectangular coordinates to polar coordinates.

9. $(4, -4)$

10. $(1, \sqrt{3})$

11. $(-2\sqrt{3}, 2)$

12. $(-3\sqrt{2}, -\sqrt{6})$

