4) The center of the circle whose diameter is [AB] with A(4,2) and B(0,6) is

   A) $(2,4)$

   B) $(4,0)$

   C) $(4,2)$

   D) $(2,8)$

   E) None of the above.

5) The following two lines $2y - 8 = 0, \quad and \quad y + 1 = 0$, are:

   A) perpendicular

   B) parallel

   C) Neither

   E) None of the above.

V- **(4 points)** Find the equation of the line passing through $(-5, 1)$ and perpendicular to $2y - 4x = 9$.

11) The equation of the line passing through $(1, -1)$ and perpendicular to $4y - 2x = 7$

   A) $y = -4x + 3$
   B) $y = -5x + 4$
   C) $y = -3x + 2$
   D) $y = -2x + 1$
   E) None of the above.

IV   Let $f(x) = -4x^2 + 8x + 2$

Find the $X - intercepts$ and $Y - intercepts$ of $f(x)$.

IV- **(4 points)** Let $f(x) = x^2 - 2x + 8$

a- Find the $X - intercepts$ and $Y - intercepts$ of $f(x)$.

2) (**3 points**) Find the equation of the circle whose center is A(1,0) and passing through B(4,5).

3) (**2 points**) Find the equation of the line that passes through the point (2,3) and perpendicular to the line 4y-x-7=0:

EXTRA PRACTICE

1- Plot each point and form the triangle ABC .Verify that the triangle is aright angle triangle. $A(-5, 3) B(6, 0), C(5, 5)$.

2- Find the equation of the line passing through $(1, -2)$ and parrallel to the line $6x - 2y = 5$

3- Find the equation of the line passing through $(2, 3)$ and perpendicular to the line $x + 2y = 3$

4- Find the center, radius, and sketch the graph of the following circle: $(x - 1)^2 + y^2 = 16$