

Question 1: Choose the correct answer write your answer in the table below (10 Marks)

1) Evaluate $a^2 - 3$, when $a = -4$.

- a) -19 b) 19 c) -13 d) 13
-

2) c subtracted from a

- a) $c - a$ b) $a - c$ c) $c + a$ d) $c < a$
-

3) Solve: $2x+3 = 39$

- a) -18 b) -29 c) 29 d) 18
-

4) 34 is 25% of what number?

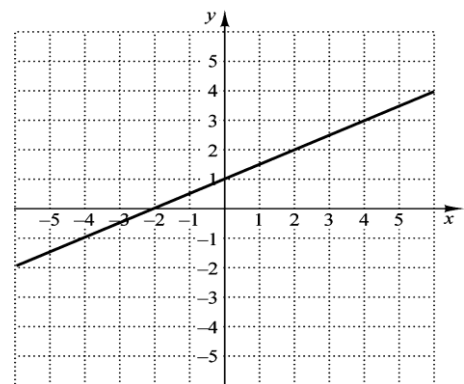
- a) 85 b) 13.6 c) 8.5 d) 136
-

5) Determine whether the given ordered pair is a solution of the equation $5x - y = 3$

- a) (1, 5) b) (-2, 4) c) (0, -3) d) (4, 5)
-

6) The slope of the line in the figure is :

- a) 2 b) $\frac{1}{2}$ c) $-\frac{1}{2}$ d) -2



7) The Degree of a polynomial $9x^3y^2 - 10x^5y + 4x + 7x^2 + 10$ is

- a) 2 b) 3 c) 5 d) 6
-

8) Convert to scientific notation 203,100,000,000,000

a) 20.31×10^{13}

b) 2.031×10^{13}

c) 20.31×10^{14}

d) 2.031×10^{14}

9) Factor $3x^6 + 12x^4$

a) $3(x^6 + 4x^4)$

b) $x^4(3x^2 + 12)$

c) $x^2(3x^4 + 12x^2)$

d) $3x^4(x^2 + 4)$

10) Find the GCF of $(4x^5, 6x^3)$.

a) $24x^5$

b) $6x^5$

c) $4x^3$

d) $2x^3$

Question	1	2	3	4	5	6	7	8	9	10
Answer										

Question 2 (3 Marks)

1- Solve the inequality $5 - 10y \leq 3 - 9y$

2- Collect like terms and then arrange in descending order $-x - 5x^2 - 8x + 14x^2 + 11 - x^3$

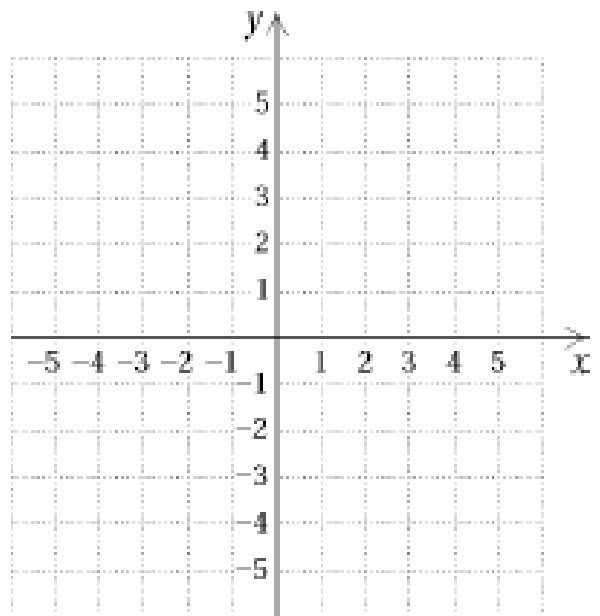
3- Remove Parentheses and simplify $(x^4 + 5x^3 - 2) - (5x^4 + 3x^3 + 2x^2 - x + 5)$

Question 3 Division of polynomials (2 Marks)

$$\frac{24x^5 - 3x^4 + 6x^3 - 9x^2}{3x^2}$$

Question 4 (3 Marks)

Graph the equation $x + 2y = 4$ and Identify the y-intercept and x-intercept



Question 5 (2 Marks)

Solve : $3x^2 + 5x = 2$