

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

1. The value of $\frac{2x+1}{y}$ when $x = 3$ and $y = 7$ is:

a) 1

b) $\frac{6}{7}$

c) $\frac{3}{7}$

d) 2

2. The reciprocal of $\frac{2}{3}$ is :

a) $-\frac{2}{3}$

b) $\frac{3}{2}$

c) 3

d) -2

3. The first coordinate is positive and Second coordinate is negative in quadrant:

a) I

b) II

c) III

d) IV

4. The degree of a polynomial $9x^3 - 10x^5 + 4x + 7x^2 + 10$ is :

a) 5

b) 3

c) 2

d) 1

5. The simplification of $(2x^2y)^2$ is:

a) $2x^4y^2$

b) $2x^2y$

c) $4x^2y^2$

d) $4x^4y^2$

6. The GCF of $3y^2$, $-5y^4$ is:

a) $3y^2$

b) y^2

c) $5y^4$

d) y^4

7. The slope for the horizontal line is:

a) 1

b) undefined

c) 0

d) $\frac{1}{2}$

8. The simplification of $-|-8|$ is:

a) -8

b) 8

c) 0

d) $|-8|$

9. The translate 8 less than y is:

a) $8+y$

b) $y*8$

c) $8\div y$

d) $y-8$

10. The slope of the line containing the point (2, 1) and (-4, 3) is:

a) $-\frac{1}{3}$

b) -3

c) 6

d) 1

Question	1	2	3	4	5	6	7	8	9	10
Answer	a	b	d	a	d	b	c	a	d	a

Question 2 : Perform and simplify the following (3 Marks)

1) $8 - 2 * 3 + 9 = \Rightarrow 8 - 6 + 9 \Rightarrow \underline{\underline{11}}$

2) $3a + 2b - (4a + 7b - 8) =$
 $= 3a + 2b - 4a - 7b + 8$
 $= -a - 5b + 8$

3) $\frac{24x^4 - 4x^3 + 2x^2 - 16x}{2x} =$
 $= 12x^3 - 2x^2 + x - 8$

Question 3 : (2 Marks)

❖ convert to scientific notation:

$2340000000000 = \dots \Rightarrow 2.34 \times 10^{12}$

❖ convert to decimal notation:

$5 \times 10^{-4} = \dots \Rightarrow 0.0005$

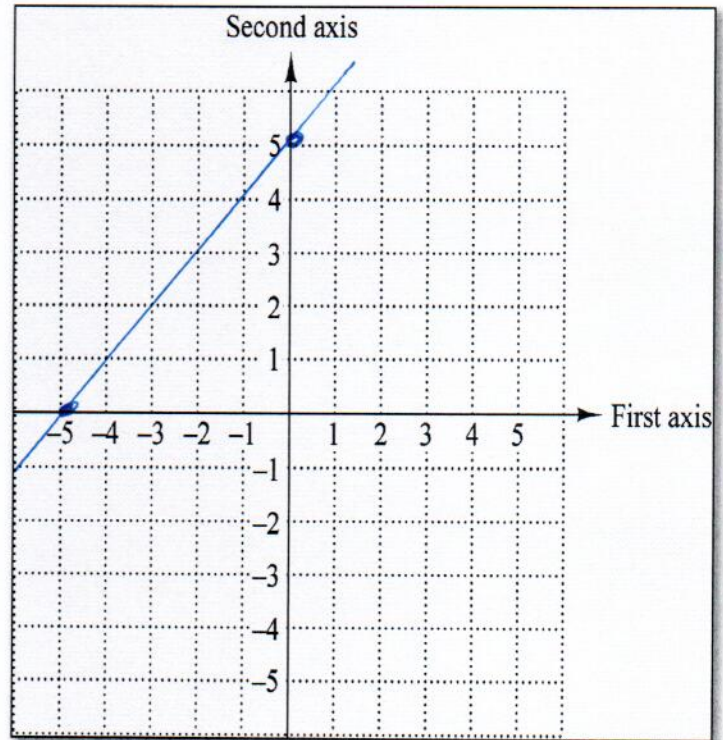
Question 4: (3 Marks)

Find the x- intercept and y- intercept of the $y = x + 5$, Then graph the equation

x	0	-5
y	5	0

x-intercept = $(-5, 0)$

y-intercept = $(0, 5)$



Question 5: (2 Marks)

1- Multiply : $(x + 7)(x - 7)$

$= x^2 - 49$

2- Solve : $x^2 - 8x = -7$

$\Rightarrow x^2 - 8x + 7 = 0$

$(x - 7)(x - 1) = 0$

$x - 7 = 0$ $x - 1 = 0$

$x = 7$ $x = 1$

$(7, 1)$ ~~$(7, 1)$~~ \leftarrow \Rightarrow $x = 1$