

Question 1: Choose the correct answer for the following (10 Marks)

1) “ x is at least 13 ”

- a) $x < 13$ b) $x \leq 13$ c) $x > 13$ d) $x \geq 13$
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2) The graph of $x = n$ is

- a) An horizontal line b) a vertical line c) an x-intercept d) a y-intercept
-

3) 15 is 25% of what number?

- a) 30 b) 60 c) 90 d) 120
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4) The GCF of $(18x^2y^5, 30x^2, 6x^5y^3)$.

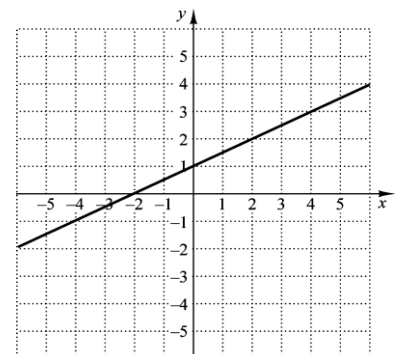
- a) $6y^3x^5$ b) $6x^2$ c) $6y^3$ d) $2x^2$
-

5) The decimal notation of the number 3.27×10^{-5} is :

- a) 0.00000327 b) 0.00327 c) 0.0000327 d) 0.000327
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6) The x-intercept of the line in the figure is :

- a) (0,1) b) (0,2)
c) (-2,0) d) (2,0)



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

- a) 5 b) 7 c) 6 d) 4

8) The excluded value of the rational expression $\frac{2x}{3-x}$

- a) zero b) 2 c) -3 d) 3

9) Subtract: $(-3a^2b^2 + 3ab - a) - (5a^2b^2 - 2ab + b^2)$.

- a) $-8a^2b^2 - 5ab + b^2 - a$ b) $-8a^4b^4 - 5a^2b^2 + b^2 + a$
c) $-8a^2b^2 + 5ab - b^2 - a$ d) $2a^2b^2 - 5ab + b^2 + a$

10) Determine whether each of the following is a perfect square trinomial

- a) $x^2 - 8x - 16$ b) $4x^2 + 20x - 25$ c) $9x^2 + 12x + 4$ d) $4x^2 - 6x + 9$

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

Question 2 (2 Marks)

Perform and simplify the following:

$$\frac{(2x^5 + 6x^4 + 4x)}{2x}$$

Question 3 (2 Marks)

Perform and simplify the following polynomial :

$$(5xy^2 - 4x^2y + 5x^3 + 2) + (-2x^2y + 3xy^2 - 3x^3y - 5)$$

Question 4 (2 Marks)

Solve the equation

$$x(x - 5) = 14$$

Question 5 (2 Marks)

Solve the inequality:

$$5 - 11y \leq 3 - 9y$$

Question 6 (2 Marks)

Graph the line $y = \frac{1}{3}x + 3$

