Promotion Examination

190 copies

Answer all questions Show your working where posseble

1. Simplify the following:

(i) $1-x\times0$ (ii) $4\frac{7}{12}-3\frac{5}{8}+1\frac{2}{3}$ (iii) $8\times3-17+15\div5$ (iv) $90\div0.03$ (v) 7x-2y-5x-4y[3]

(vi) $x \div x^2$ [3] (vii) 7 - (-4) - 3 [3]

Find the L.C.M of 5, 6 and 8.
 Find the average (arithmetic mean) of: 35, 46, 42, 9
 [3]

4. In a Maths textbook $\frac{2}{5}$ covers arithmetic and $\frac{3}{7}$ covers Algebra. The remainder is Geometry.

If the book has 210 pages, how many pages cover Geometry? [5]

5. Find the H.C.F of 45 and 60. [2]

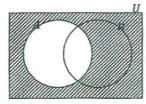
6. Convert

(i) 10101₂ to base 10. [3]

(ii) 39₁₀ to base 8. [3]

7. Given that $Y = \{0,1,3\}$, determine the possible subsets. [2]

8. Identify the shaded area.



[3]

[5]

9. Given the following sets:

$$A = \{a, t, e\}, B = \{t, e, a, m\}, C = \{e, a, t\} \text{ and } D = \{m, a, t\}$$

Identify:

(a) Equal sets [2]

(b) Equivalent sets [2]

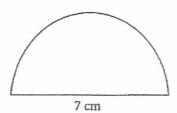
discounted.

10. Find the discount price if a discount of $12^{-\frac{1}{2}}\%$ is given on \$280. [5]

11. The cost of a vehicle was \$ 68 000.00 cash or a deposit of \$8 000 and 24 monthly payments of \$2 750 each. Find the difference between the instalment price and the cash price. [5]

12. Calculate the third angle of a triangle if two angles measure 35° and 60°. [2]

13. Calculate the perimeter of the shape shown if the semi-circle has a diameter of 7 cm.



Use $\pi = \frac{22}{7}$

14. A boy is 5 yrs old. His father is four times his age. In x yrs. Time how old will his father be?

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- 15. The students observing cars at the school gate noted the following colours of 25 cars: red \\ white \\ || || blue || silver \\ \\ \\
 - (i) Show the results in a neat table using the headings below.

Colour	Tally Marks	Frequency	
	The second secon		
		average department	

- (ii) Illustrate the results in the form of a bar chart.
- (iii) Which colour was the most popular?
- (iv) What percentage of the cars was white?

[4]

[4]

[1]

[2]