

MEMO.

Question 1:

1.1. C	1.2. B	1.3. A
1.4. C	1.5. B	1.6. B
1.7. D	1.8. C	1.9. A
1.10. D	1.11. B	1.12. C
1.13. C	1.14. C	1.15. D.

Question 2:

2.1.2. $4 \div 0$ is undefined

2.1.2. $x + y = t$ means $x = t - y$.

2.2. $-5,8$; $0,058$; $0,58$; $0,85$; $8,5$

Question 3:

3.1.1. $-1 - 6 - 2 = -9$

3.1.2. $\sqrt{25x^2} = 5x$

3.1.3. $7^1 \times 2^2 = 28$

3.2.1. $-5 + (-1)(-4) = -5 + 4 = -1$

3.2.2. $5 + (-6) + (-4) - (-3)^2 = 5 - 6 - 4 - 9 = -14$

Question 4:

4.1. $8, 3, -2, -7$.

4.2.

x	1	3	4	7	9	11
y	3	7	9	15	19	23

4.3. $y = 4x + 2$.

Question 5:

5.1. $\frac{5}{4} \times \frac{4}{3} = \frac{5}{3}$.

5.2. $\left[\frac{4}{27} \times \frac{16}{9} \right] - \frac{1}{8} = \frac{64}{243} - \frac{1}{8} = \frac{269}{243}$.

Question 6

$$6.1. \quad \frac{20}{100} \times R65 = R13$$

$$6.2. \quad A = P(1+in) \Rightarrow A = 1500 \left(1 + \frac{6}{100} \times 3\right)$$
$$A = R2770.$$

$$6.3. \quad \frac{3}{5} \times 68,5 = 41,1.$$

$$6.4. \quad 3+4=7 \quad \frac{3}{7} \times R938 = R402$$
$$\frac{4}{7} \times R938 = R536$$

Question 7

$$7.1. \quad 3x + 20 + 10 - 2x + 4x + 18 + 35 - 5x = AB$$
$$AB = 83.$$

$$7.2.1. \quad -(-64x^3) - x^3 = 63x^3$$

$$7.2.2. \quad 8x^3y^3 - 4x^2y^3 - 8x^3y^3 = -4x^2y^3$$

$$7.2.3. \quad \frac{9x^2y}{3xy^2} = \frac{3x}{y}.$$

$$7.3.1. \quad x = -9.$$

$$7.3.2. \quad x - 2x = -5 - 3 \Rightarrow -x = -8$$
$$x = 8.$$

$$7.4. \quad 5x + 8 = 3x \Rightarrow 5x - 3x = -8$$
$$2x = -8 \Rightarrow x = -4.$$

Question 8

8.1.1. May.

$$8.1.2. \quad 10 + 8 + 5 + 7 + 8 = 38 \times 1000 = 38000$$

$$8.1.3. \quad \frac{38000}{5} = 7600.$$

$$8.2.1. \quad \begin{array}{r|l} 1 & 369 \\ \hline 2 & 336679 \\ \hline 3 & 344567889 \\ \hline 4 & 012356 \end{array}$$

$$8.2.2. \quad 26$$

$$8.2.3. \quad 34$$

$$8.2.4. \quad \frac{809}{25} = 32,4.$$

Question 9

$$9.1.1. \quad C = 2\pi r = (2\pi)(70) = 140\pi.$$

$$6 \text{ times } (140\pi) = 840\pi =$$

$$9.1.2. \quad A = \pi r^2 - l \times b \\ = \pi(70)^2 - (22 \times 2) \\ = 4900\pi - 44 = .$$

$$9.2.1. \quad AC^2 = 4^2 + 3^2 \\ AC^2 = 25 \quad AC = 5 \text{ cm}$$

$$9.2.2. \quad SA = 2\left(\frac{1}{2} \text{ base}\right) + (\text{perimeter} \times \text{height}) \\ = 2\left(\frac{1}{2}(3)(4)\right) + [(3+4+5) \times 15] \\ = 12 + (12 \times 15) = 192 \text{ cm}^2.$$

$$9.3. \quad A(4:3) \rightarrow A'(-4:3) \\ B(-2:1) \rightarrow B'(-1:-3) \\ C(1:-2) \rightarrow C'(-1:2).$$

Question 10

$$10.1. \quad AD \text{ and } BC \quad (120^\circ + 70^\circ \neq 180^\circ)$$

$$10.2. \quad 2x = 46^\circ \quad (\cong \angle \text{s opp} = \text{sides}) \\ \Rightarrow x = 23^\circ \quad (\text{ext } \angle \text{ of } \Delta).$$

$$10.3. \quad x + 50^\circ = 110^\circ \quad (\text{alternate } EC \parallel AB)$$

$$\Rightarrow x = 60^\circ \\ y + 110^\circ = 180^\circ \quad (\text{cointer. } EA \parallel BC) \\ \Rightarrow y = 70^\circ.$$