

REMEDIAL ACTIVITIES FOR SECONDARY IV MATHEMATICS

201-03-50, Sections 3001, 3005, 3007

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Question 1 (5 Marks). Solve the equation for x .

$$4(2x - 1) - 3(x + 2) = 7x - 9:$$

Question 2 (5 Marks). Solve the equation for a .

$$b = c(a - 2) + 3:$$

Question 3 (5 Marks). The sum of three consecutive integers is 21. Find them.

Question 4 (6 Marks). Find the x -intercepts and the y -intercept of the line given below and graph it.

$$3x + 9y = 18$$

Question 5 (4 Marks). Find the equation of the line through the point $(-4; 3)$ and parallel to the line:

$$x + 4$$

Question 7 (8 Marks). Solve the following system of linear equations.

$$\begin{aligned}3x - 5y &= 27 \\4x + 7y &= 5\end{aligned}$$

Question 8 (5 Marks). Simplify the expression and express your answer with positive exponents only.

$$\frac{4x^{-1}y^{40}}{2^{-2}x^4y^{10}}^{-2}$$

Question 9 (5 Marks). Simplify the following expression.

$$(2x + 5)(4x^2 + 3x - 1) - x(x + 3)(x - 3)$$

Question 10 (10 Marks). Factor each polynomial completely.

a) $2x^3 + 2x^2 - 8x - 8$

b) $6x^2 + 7x - 10$

Question 11

Question 12 (5 Marks). Rationalize the denominator and simplify.

$$\frac{7}{3 + \sqrt{2}}$$

Question 13 (6 Marks). Simplify the expression.

$$4\sqrt[3]{12} - \sqrt[3]{27} + 2\sqrt[3]{48}$$

Question 14 (6 Marks). Solve the equation for x .

$$x(x - 10) = 22$$

Question 15 (8 Marks). Graph the parabola using the x -intercepts, the y -intercept and the vertex.

$$y = x^2 + 2x - 8$$

Question 16 (8 Marks). Find the mean, median, mode and standard deviation for the following data

23;21;18;18;24;26;32;29

DAWSON

ANSWERS

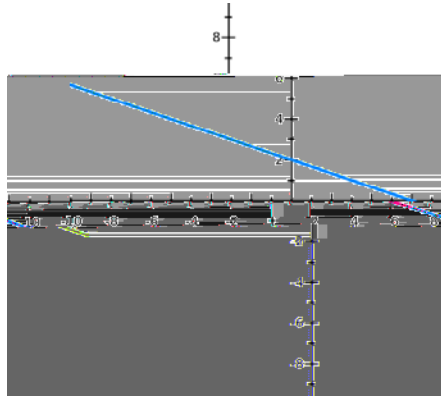
1. $= -\frac{1}{2}$

2. $= \frac{-3}{2} + 2$

3. $-8, -7, -6$

4. $-$: (6,0)

$-$: (0,2)



5. $= -\frac{1}{4} + 2$

6. $= -3 + 12$

7. $= 4 = -3$

8. $\frac{10 \cdot 60}{2^8}$

9. $7^3 + 26^2 + 22 - 5$

10. a. $2(+2)(-2)(+1)$ b. $(6-5)(+2)$

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