



NAME: _____

DATE: _____

CLASS: _____

MR EMMAN RECANEL

I. MULTIPLE CHOICE (2 marks each)

Identify the letter of the correct answer and write the CAPITAL letter on the space provided.

1. Solve: $9x - 15 = 3$ ()

- (A) 46 (B) 9 (C) -2 (D) 2

2. Solve: $5 = -3x + 14$ ()

- (A) $-\frac{19}{3}$ (B) 3 (C) -3 (D) $\frac{19}{3}$

3. Solve: $4x + 2.8 = 6.4$ ()

- (A) -1.2 (B) -0.4 (C) 5.7 (D) 0.9

4. Solve: $\frac{x}{7} - 4 = 5$ ()

- (A) 39 (B) 2 (C) 63 (D) 33

5. Write an equation for this statement: *A number divided by 2, increased by 5, is 8.* ()

- (A) $\frac{x+5}{2} = 8$ (C) $\frac{2}{x} + 5 = 8$
(B) $\frac{x}{2} = 5 + 8$ (D) $\frac{x}{2} + 5 = 8$

6. Solve: $3(x + 5) = 12$ ()

- (A) 7 (B) -6 (C) -1 (D) 4

7. What is *Six less than five times a number is 8* in mathematical symbols. ()

- (A) $6 - 5x = 8$ (C) $5 - 6x = 8$
(B) $5x - 6 = 8$ (D) $6x - 5 = 8$

8. What is the solution to the equation $13 - 4x = 3x - 8$? ()

- (A) $-\frac{1}{3}$ (B) 3 (C) -3 (D) $\frac{1}{3}$

9. Find the value of the q in the equation $3(5q - 4) = 2(4q + 6)$. ()

- (A) $-3\frac{3}{7}$ (B) $\frac{7}{24}$ (C) $-\frac{7}{24}$ (D) $3\frac{3}{7}$

10. If $a = 2$, $b = 3$ and $c = 1$, which of the following is incorrect? ()
- (A) $2a + 3b + c = 15$ (C) $3a + 3b + 2c = 17$
(B) $a + 2b + 3c = 11$ (D) $a + b + c = 6$
11. What is the value of x to make the equation $\frac{2x-3}{x-4} = \frac{2}{3}$ true? ()
- (A) $\frac{-1}{4}$ (B) $\frac{1}{4}$ (C) -4 (D) 4
12. Find the value of x of $-3x + 25 + x + 21 = 2$. ()
- (A) 22 (B) 3 (C) -22 (D) -3
13. John is 4 times as old as David. In 2 years' time, John will be 3 times as old as David. ()
How old is David now?
- (A) 4 (B) 5 (C) 6 (D) 8
14. Solve for the value of x in the equation $9 - 9x = 81$. ()
- (A) $x = -10$ (B) $x = -72$ (C) $x = -8$ (D) $x = 8$
15. Mauro is $5x$ years old 8 years ago. What is his present age? ()
- (A) $5x + 8$ (B) $5x - 8$ (C) $8 - 5x$ (D) $5 + 8x$

II. MECHANICAL SOLVING:

Solve each of the following expressions.

16. $x - 4 = 4x - 4$

17. $\frac{3}{2x+5} = \frac{4}{1-3x}$.

18. $3x - [3 - 2(3x - 7)] = 37.$

19. $4(6x - 7) - (3x - 5) - 40 = 0$

20. If $\frac{3x}{4} + \frac{x}{8} = 1\frac{1}{2} + 3\frac{3}{4}$

- (a) Solve for the value of x .
- (b) Find the value of $7x + 2$.

21. $\frac{5x-1}{8} - \frac{5-7x}{2} = \frac{3(6-x)}{6}$

III. WORD PROBLEMS

Read carefully each problem and solve. Use the 3-step process in problem solving as discussed.

1. Four less than half of a number is 17. Find the number.

2. Find three consecutive integers whose sum is 171.

3. Find four consecutive even integers whose sum is -244.

4. The sum of three numbers is 75.

The second number is 5 more than the first number, the third is three times the second.

Find the three numbers.

5. The perimeter of a rectangle is 36 cm.

The length of the rectangle is 3 less than twice the width.

(a) Find the dimensions of the rectangle.

(b) Find the area of the rectangle.

6. A bank teller has some \$20 and \$50 bills.

The number of \$50 bills is 7 less than twice the number of \$20 bills.

If the total money is \$1090, how many \$20 bills are there? How many \$50 bills does he have?

7. A man bought x apples and twice as many oranges. He also bought 5 pears fewer than apples. Apples cost 40 cents each, oranges cost 30 cents each and pears cost 80 cents each. If the man spent a total of \$77, find
- (a) the value of x ,
 - (b) the amount he spent on pears.

8. Anna is now four times as old as her brother John. In 4 years, Anna's age will be twice Jong's age then.
- (a) Find their present ages.
 - (b) Find Anna's age 3 years ago.

9. Nancy is 7 years younger than half of Monique's age. The sum of their ages is 56 years. Find Nancy's age.