FORMATIVE ASSESSMENT - SECOND MID TERM

MATHEMATICS

Max. Marks: 50

Std - VIII

Time: 2 Hrs

Name of the School:	**Name of the Student:**
_____	_____
Place:	**Roll No.:**
_____	_____

I. Choose the correct answer: **10 x 1 = 10**

1) 12% of 500 is _____.

a) 60 b) 0.6 c) 6 d) 0.06

2) $y = 0$ is the equation of the _____ axis.

a) y axis b) x axis c) origin d) x and y

3) The decimal form of 250% is _____.

a) 2.5 b) 25 c) 0.25 d) 0.025

4) The point (a, b) lies on the line $4x - 3y = 8$. If $a = 2$, then b = _____.

a) 1 b) 6 c) 1/2 d) 0

5) The highest power of the variable in a quadratic equation is _____.

a) 2 b) 1 c) 3 d) 4

6) What percentage of 60 is 15? _____.

a) 40 % b) 25% c) 2.5% d) 15%

7) The tax on income earned is _____

a) Direct Tax b) Indirect tax c) GST d) None

8) If the marked price of an article is ₹ 9500 and the discount is ₹ 760, then the discount percentage is _____.

a) 152% b) 9% c) 8% d) 7%

9) The expression $4a - b$ is a _____

a) Monomial b) Binomial c) trinomial d) None

10) The algebraic expression for ‘ The difference of three times r and twice w’ is _____

a) $3w + 2r$ b) $3r$ c) $3r - 2w$ d) $2w + 3r$

II. Match the following: **5 x 1 = 5**

11) (1, –2)	-	C.P (1 – loss %)
12) S.P	-	SV $\left(1-\frac{r}{100}\right)^n$
13) C.P	-	Linear Equation
14) WDV	-	IV quadrant
15) $3x+2=5$	-	$\frac{\text{S.P}}{1+\text{profit\%}}$

III. Do as directed: (any 10) **10 x 2 = 20**

16) Express as fractions: a) 7.5% b) 65%

17) What percentage of? a) 40 is 20 b) 100 is 2

18) Sketch the graph of $x - 2y = 0$

19) Express the following as percentage: a) 0.7 b) $4\frac{3}{8}$

20) A student gets 31% marks in an examination but fails by 12 marks. If the pass percentage is 35%, find the maximum marks of the examination.

21) What is 12% of 5% of 3500?

22) Solve : $y + \frac{1}{6} - 3y = \frac{2}{3}$

23) The sum of three consecutive multiples of 8 is 192. Find them.

24) A number is divided into two parts, such that one part is 10 more than the other. If the two parts are in the ratio 5 : 3, find the number and the two parts.

25) What is the rate of discount in a 'Buy 3 get 2 free' sale?

26) Find the difference in the compound interest on ₹ 62,500 for 1½ years at 8% p.a. compounded annually and when compounded half-yearly.

27) The marked price of a bicycle is ₹ 9,500 and the discount is ₹ 760. Find the S.P and discount %.

28) Rakesh's father is 4 times as old as Rakesh. After 5 years, the father will be three times as old as Rakesh. Find their present ages.

IV. Answer any one of the following: **1 x 5 = 5**

29) Two equal sides of a triangle are each 8 *m* less than six times the third side. If its perimeter is 23 *m*, what are its side-lengths?

30) Find the difference between 500 reduced by 12% and then by 10% and 500 reduced by 22%. Find the effective reduction percentage in the first case.

V. Answer the following questions: (any 2) **2 x 5 = 10**

31) A box of chocolates contains bars of milk chocolate and dark chocolate. The weight of each bar of milk chocolate and dark chocolate is 150 g and 100 g respectively. If the number of bars of dark chocolate is 12 more than the number of bars of milk chocolate, and the total weight of the chocolates in the box is 2.95 kg, find the number of bars of milk and dark chocolate.

32) An over-head tank is full with water. Water leaks out from it, at a constant rate of 10 litres per hour. Draw a "time-wastage" graph for this situation and find

a. The water wasted in 150 minutes

b. The time at which 75 litres of water is wasted

33) A total of 90 currency notes, consisting only of ₹ 5 and ₹ 10 denominations, amount to ₹ 500.