

Guru Gobind Singh Public School

Sector 5/B, Bokaro steel city

Assignment for session (2018-19)

Class VIII

Subject: Mathematics

F.M. 80, 70% of Term II + 30% of Term -1 (56+24 =80 marks)

Portion from Term -1 Chapters (2, 6, 11)

Portion from Term- 2 Chapters (7, 9, 10, 12, 13, 14, 16) according to syllabus

1. Simplify : $(4^{-1}x 3^{-1})^2$
2. Factors of $x^2 - x - 72$ are.....
3. Define the 'conversion Period,' (use for Compound Interest)
4. In a square one diagonal is 7.5cm. Find the other diagonal.
5. Write an equation having $a=27$, as the solution.
6. Find the value of k when $\frac{1}{4} \% \text{ of } k = 9$
7. $1m^3 = \dots\dots\dots$ litre
8. $3y-4x=0$ is a case ofvariation
9. If 3×12 is a multiple of 3 then, find the value of x.
10. Draw the shape of co-ordinate axes.
11. Find the value of x for which $\left(\frac{3}{5}\right)^4 \times \left(\frac{3}{5}\right)^5 = \left(\frac{3}{5}\right)^{3x}$
12. Factorise: $100x^2 - 81$
13. Construct a square ABCD whose each side be 3.5cm.
14. Find the value of x; if $2x + 4 = x - 5$
15. (a) 9 months =quarters. (Fill in the blanks)
(b) The formula for Compound Interest is $CI = A - P$
16. If 43% of a number 'a' is 86. Find 'a'.
17. The area of rhombus is $50cm^2$ and one of its diagonal is 15cm. Find the other diagonal.
18. A car covers 216 km in 18 litre of petrol. How much distance would it cover in $12\frac{1}{2}$ litre of petrol? (solve by variation method)
19. The sum of the digit of a two digit number is 9. The number is 6 times the unit digit. Find the numbers.
20. Plot the points (5, 0), (5, 2), (5,8). Do they lie on a line? What is your observation? (use graph paper)
21. By what number should $\left(\frac{-3}{2}\right)^{-3}$ be multiplied, so that the product is $\left(\frac{9}{4}\right)^{-2}$?
22. Factorise: $\frac{1}{49}x^2y^2 - \frac{9}{25}y^2z^2$
23. Construct a quadrilateral BDEF, where $DE=4.5$ cm, $EF=3.5$ cm, $FB=6.5$ cm, $\angle F = 50^\circ$ and $\angle E = 100^\circ$
24. 50kg of an alloy of lead and steel contains 60% lead. How much lead must be melted into it to make an alloy containing 75% lead?
25. Find the compound interest on Rs 5000 at the rate of 10% p.a., compounded semi-annually for $1\frac{1}{2}$ years.
26. The S.P. of 4 shirts is the same as the CP of 6 shirts. Find the gain or loss percent.
27. The area of trapezium is $180 cm^2$ and its height is 9cm. if one of the parallel side is longer than other by 6cm. Find the length of two parallel sides.
28. 12 men can dig a pond in 8 days. How many men can dig it in 6 days?
29. Replace A,B,C by suitable numerals:
$$\begin{array}{r} A \quad B \\ \times B \quad A \\ \hline (B+1)CB \end{array}$$
30. Draw the graph of the function $P=4x$.
31. (a) Write in standard form: 360000, 0.000543
(b) write in usual forms: 5.32×10^{-4} , 1.679×10^6
32. Factorise: $40x^2 + x - 6$
33. Construct a parallelogram ABCD, if $AB=6.2$ cm, $AC=7$ cm, $BD=7.2$ cm.
34. Divide Rs. 1380 among A,B, and C such that A gets 5 times of C's and 3 times of B's share.
35. The difference between Compound interest and simple interest for 3 years at 10% per annum is Rs 62. Find the sum.

36. Arun bought a shirt for Rs 770, including 10% VAT. And a jacket for Rs 4480 including 12% VAT. Find the list price (without VAT of the shirt and jacket together)
37. If the rainfall on a certain day was 5cm. How many litres of waterfall on 1 hectare field on that day?
38. A hostel had ration for 60 days for 500 students, after 12 days 300 more students join the hostel. How long will the remaining rations last?
39. Complete the magic square.

	14		0
8		6	11
4		10	7
	2	1	12

(Hint: Try to complete the number in the box so that vertical or horizontal sum of number is equal to 30.)

40. Draw the graph of the function $A=x^2$. From the graph, find the value of A when-
- (a) $x=2$ (b) $x=4$
