## INDIAN SCHOOL MUSCAT - MIDDLE SECTION - DEPARTMENT OF MATHEMATICS - TERM:02 (2017 - 18)



## NAME OF THE STUDENT:

CLASS: 8 SEC: SUB: MATHEMATICS



DATE: 07.02.18 TOPIC: LINEAR EQUATIONS & MENSURATION WORKSHEET NO: 03

S.NO	ANSWER THE FOLLOWING QUESTIONS
1	Find the height of the trapezium if the sum of the lengths of its bases is 50cm and area 500cm <sup>2</sup> .
2	Area of a rhombus is 75cm <sup>2</sup> and one of its diagonals is 15 cm. Find the length of the other diagonal.
	ABCD is a quadrilateral. If diagonal AC = 15cm, DM $\perp$ AC, BN $\perp$ AC, DM = 9cm, BN = 12cm, find the area
3	of quadrilateral.
4	How many bricks each 25cm $ imes$ 15cm $ imes$ 8cm are required for a wall 32m long, 3m high and 40cm thick?
5	Surface area of a cube is 486cm <sup>2</sup> . Find its volume.
6	CSA of a cylinder of height 35cm is 3300cm <sup>2</sup> . Find its volume.
7	Two cubes each with edge 5cm are joined end to end. Find the total surface area of the resulting solid.
8	The diameter and height of a cylindrical vessel are 42cm and 30cm respectively. How many litres of water can it hold?
9	One of the parallel sides of a trapezium is 5cm longer than the other. If the $\perp$ distance between them is 9cm and area is 126cm², find the length of the parallel sides.
10	A swimming pool is 20m long, 15m wide and 4m deep. Find the cost of cementing its walls and floor at the rate of ₹12 per sq.m
11	If the rainfall on a certain day was 5cm, how many litres of water fell on a piece of land 40m $ imes$ 30m?
12	The radius and height of a cylinder are in the ratio 5:7 and its volume is 550cm <sup>3</sup> . Find its radius.
13	If 10m – 28 = 6 – 7m , find m.
14	12(3-x) = 24 Find x.
15	Find a number such that if 8 is subtracted from 9 times the number, the result is 6 more than twice the number.
16	Present ages of A and B are in the ratio 5:6 Two years ago, their ages were in the ratio 4:5 Find their present ages.
17	Solve: a) 0.3(6+y) = 0.5(8-y) b) $\frac{5x-4}{8} - \frac{x-3}{5} = \frac{x+6}{4}$ c) $\frac{7x+4}{x+2} = \frac{-4}{3}$ d) $\frac{7x}{2} + \frac{x}{4} = 11 + \frac{x}{8}$
18	Find three consecutive even numbers such that the sum of the first and the last numbers exceed the second number by10.
19	One of the supplementary angles is 36° more than the other. Find the measure of each angle.
20	The speed of two trains differ by 15km/hour. The slower train covers in four hours while the faster one covers the same distance in three hours. Find the speed of each train.
21	A sum of ₹500 is in the form of denominations ₹10 and ₹20. If there are 35 notes in all, find the number of notes in each denomination.
	The unit digit of a two-digit number is 3. The number is seven times the sum of the digits. Find the
22	number.
23	Sushil is four times as old as Sunil. Five years ago, Sushil was seven times as old as Sunil was then. Find their present ages.
23	The numerator of a fraction is 4 less than the denominator. If 1 is added to the numerator and 2
24	subtracted from the denominator, the fraction becomes $\frac{8}{9}$ . Find the original fraction.