Class VIII   **Max. Marks: 20**

14.01.2019   **Duration: 45min.**

1. The cost of a pair of shoes is Rs. 900. The sales tax charged was 8%. Find the bill amount.   [1]

2. Find the product $(6ab)(4a^2b)(5ab^2)$

OR

  Find the product $2a(3a + 5ab)$ [1]

3. The diagonals of a rhombus are 15cm and 24cm. Find the area of the rhombus.   [1]

4. Using suitable identity, find the value of $11.7^2 − 8.3^2$ [2]

5. Find the volume of a cylindrical can of height 25cm and base radius 14cm. $\left[\pi = \dfrac{22}{7} \right]$

OR

  How many 3 metre cubes can be cut from a cuboid measuring 18m x 12m x 9m?   [2]

6. Simplify $(3x + 5)^2 − (3x − 5)^2$

OR

  Find the product using suitable identity $\left(x − \dfrac{1}{x} \right)\left(x + \dfrac{1}{x} \right)\left(x^2 + \dfrac{1}{x^2} \right)\left(x^4 + \dfrac{1}{x^4} \right)$ [3]

7. A rectangular room of dimensions 9m x 7m x 3m is to be painted. If it costs Rs. 275 per square

   metre, find the cost of painting the walls of the room.

OR

   A match box measures 4cm x 2.5cm x 1.5cm. What will be the volume of a packet containing

   12 such match boxes? How many such packets can be placed in a cardboard box whose size is

   60cm x 30cm x 24 cm?   [3]

8. Mahima bought a plot of land for Rs. 32,50,000. She built a boundary wall around it which cost

   her Rs.3,45,000. She advertised in the local newspaper about her intention to sell it which cost

   her Rs.5,000. She was finally able to sell it for Rs. 39,00,000. What is her profit per cent?   [3]

9. Find the difference between compound interest and simple interest on a sum of Rs. 15000

   at the rate of 6% per annum for 2 years compounded half yearly.

OR

   The value of a car depreciates at the rate of 10% p. a. What will be its value 2 years hence,

   if the present value is Rs. 600000? Also find the total depreciation during this period.   [4]

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