INDIAN SCHOOL AL WADI AL KABIR
DEPARTMENT OF MATHEMATICS (2015-2016)
WINTER HOLIDAY HOME WORK
CLASS: VIII
NAME OF STUDENT $\qquad$ DATE:

1. The dimensions of an oil can is $60 \mathrm{~cm} \times 35 \mathrm{~cm} \times 24 \mathrm{~cm}$. How many square metres of tin sheet is required to make such 15 cans?
2. Rahul purchased an old sewing machine for ₹ 2875. After spending ₹225 on its repair, he sold it for $₹ 3565$. Find his profit or loss percent.
3. The area of a rhombus is $48 \mathrm{~cm}^{2}$. If one of the diagonal is 8 cm , find the length of the other diagonal.
4. Find the difference between the simple interest and compound interest on₹ 2400 for 2 years at 5\% per annum compounded annually.
5. 72 books are packed in 4 cartons of same size. How many cartons are required for 360 books?
6. Find the volume of a cube whose surface area is $600 \mathrm{~cm}^{2}$
7. A second hand car bought for ₹ $2,00,000$. Its value depreciated at the rate of $10 \%$ per annum Find its value after 2 years?
8. A table marked at $₹ 15,000$ is available for $₹ 14,500$. Find the discount and discount percent.
9. Find the smallest number by which 1080 be divided so that the quotient becomes a perfect cube. Also find the cube root of the quotient,
10. Find the compound interest on ₹8000 for $1 \frac{1}{2}$ years at $10 \%$ p. a compounded semi-annually
11. A cylindrical pillar is 3.5 m high and 50 cm in diameter. Find the cost of painting it at the rate of $₹ 15$ per $\mathrm{m}^{2}$.
12. Find the diagonal of a quadrilateral whose area is $273 \mathrm{~cm}^{2}$ and the lengths of the perpendiculars drawn from opposite vertices are 18 cm and 24 cm respectively.
13. How many cubes of edge 3 cm can be cut from a cuboid of dimensions $18 \mathrm{~cm} \times 12 \mathrm{~cm} \times$ 9 cm ?
14. Karan bought two cricket bats for ₹560 and ₹240 respectively. He sold the first bat at a gain of $15 \%$ and the second at loss of $5 \%$. Find the loss or gain percent in the whole transaction?
15. Subtract $1+x^{2}+y^{2}$ from the sum of $x^{2}-y^{2}$ and $1-x^{2}-y^{2}$
16. Simplify and evaluate for $m=(-2) \quad 10 m^{2}-3 m(5+2 m)-10$
17. The area of a trapezium is $182 \mathrm{~cm}^{2}$ and height 14 cm . The one of the parallel sides is shorter than the other by 16 cm . Find the length of parallel sides.
18. Multiply $\left(2 x^{3}+3 y\right)$ and $(4 x-8 y)$
19. A worker receives $₹ 11250$ as bonus which is $15 \%$ of his annual salary. Find his monthly salary.
20. The circumference of the base of a cylindrical vessel is 132 cm and height 25 cm . How many litres of water can it hold?
21. A room is 22 m long, 8 m wide and 10 m high. Find the cost white washing four walls and the ceiling at rate of $₹ 15$ per $\mathrm{m}^{2}$.
22. Multiply $(2 x-7)\left(6 x^{5} y-7 x^{2} y^{2}-8 y\right)$
23. Raj bought an air conditioner for₹22,000 including tax of $10 \%$. Find the price of the air conditioner before VAT was added.
24. The population of a city is 20,000 this year.it has increased at the rate of $5 \%$ per annum. What was the population 2 years ago?
25. A roller of diameter 84 cm and length 120 cm takes 700 complete revolutions to cove a playground field .Find the area of field in $\mathrm{m}^{2}$.
