



**INDIAN SCHOOL AL WADI AL KABIR**  
**DEPARTMENT OF MATHEMATICS (2014-2015)**

**WINTER HOLIDAY HOME WORK**

**NAME OF THE STUDENT:** ..... **CLASS: VIII SEC:** ..... **ROLL NO:** .....

1. What is the least natural number by which 2160 should be divided so that the quotient is a perfect cube?
2. A machine takes 6 hours in filling 48 containers. How many containers will it fill in 48 hours?
3. Find the perimeter and area of a rectangle whose dimensions are  $(2y^2 - 5y)$  and  $(6y + 7)$ .
4. Evaluate:  
(a)  $58 \times 62$     (b)  $9.2 \times 8.8$     (c)  $61^2 - 39^2$
5. Find the product by using identity:  
(a)  $(x - y^2)^2$   
(b)  $(3x + 4y)(3x - 4y)$   
(c)  $(2x + 5)(2x - 3)$   
(d)  $(\frac{1}{2x} + \frac{2}{3y})^2$
6. If the volume of a cube is  $4096 \text{ cm}^3$ . Find the length of its side?
7. 2 persons could fit new windows in a house in 3 days.  
(1) One of the persons fell ill before the work started. How long would the job take now?  
(2) How many persons would be needed to fit the windows in one day?
8. A car was bought for ₹625000. Its value depreciates at the rate of 8% per annum. Find its value after 2 years.
9. Arya took a loan of ₹ 80000 from a bank. If the rate of interest is 10% per annum, Find the difference in amounts she would be paying after  $1\frac{1}{2}$  years, If the interest is  
(1) Compounded annually    (2) Compounded semi-annually
10. I purchased a LED TV for ₹ 54000 including 8% VAT. Find the price before VAT was added.
11. Suma bought a laptop for ₹13200 including 10% VAT on it. Find marked price of the laptop.
12. Pradeep sold two pairs of shoes for ₹ 1000 each. On one he gains 10% and on the other he loss 10%. Find the gain or loss percent in the whole transaction?