

**ST. THOMAS SCHOOL INDIRAPURAM**  
**SUMMER VACATION HOLIDAY HOMEWORK (2020-21)**

**CLASS – VII    SUBJECT – MATHEMATICS**

**ACTIVITY :**

Study about symmetry and its types. Find and mention where it is used in architecture, designing, etc. Do this project in A4 sheet/drawing sheet and submit the same to your respective teachers through mail id.

**WORKSHEET**

1. Find the mean of first 12 odd numbers.
2. Verify and name the property used:  
 $25 \times [ (-32) + (-16) ] = 25 \times (-32) + 25 \times (-16)$
3. Simplify :  $6142 \times 79 + 6142 \times 16 + 6142 \times 5$
4. A bag contains 3 red, 2 blue and 5 white balls. A ball is drawn at random. What is the probability of drawing a red ball, a white ball and a blue ball.
5. Find mean, median and mode for the following data:  
7, 8, 3, 8, 6, 12, 16, 9, 11, 9, 10.
6. In a test ( +5 ) marks are given for every correct answer and ( -2 ) for incorrect answer. (i) Radhika answered all the questions and scored 30 marks though she got 10 correct answers. (ii) Rohan also answered all the questions and scored ( -12 ) marks though he got 4 correct answers. How many incorrect answers had they attempted?
7. Find the product using properties:  
(i)  $8 \times 53 \times (-125)$       (ii)  $625 \times (-35) + (-625) \times 65$
8. Write down a pair of integers whose:  
(i) Sum is  $-3$     (ii) difference is  $-5$     (iii) sum is 0
9. The ages in years of 10 teachers of a school are as follows:  
32, 41, 28, 54, 35, 26, 23, 33, 38, 40  
(i) What is the age of the oldest and the youngest teacher?  
(ii) What is the range of the ages of teachers?  
(iii) What is the mean age of these teachers?
10. Find the mean of all composite numbers between 1 to 15(exclude 15).
11. Find the median of the data: 24, 36, 35, 46, 17, 18, 25.

12. A can contains 14 litres of oil. 50 ml of oil leaked. How many pouches of 930 ml each can be made from the remaining oil?

13. In a bag there are 9 cards bearing numbers 1 to 9. A card is picked up at random. What are the chances of picking :

(i) 3 (ii) odd number (iii) prime number (iv) even number.

14. Answer the following:

(i) Find the average of your study hours for 3 days of the week.

(ii) Find the mean of your sleeping hours during the week.

(iii) A number is drawn at random from 21 to 32. What is the probability of getting an odd number?

(iv) A dice is rolled once. What is the probability of getting a number less than 5.

15. Fill in the blanks:

(i) The greatest negative integer is \_\_\_\_\_.

(ii) The multiplication identity of integers is \_\_\_\_\_.

(iii) The integer \_\_\_\_\_ is neither positive nor negative.

(iv) The additive inverse of 7 is \_\_\_\_\_.

(v) The integer 5 more than  $-4$  is \_\_\_\_\_.