

P.S. SENIOR SECONDARY SCHOOL

STD: VI MATHEMATICS – ENRICHMENT WORKSHEET

1. A fighter jet flying at an altitude of 5000m suddenly gains 4000m. Later it comes down to a height of 2000m to avoid detection by the enemy's radar. Find the height at which the jet is finally flying. Also find the net change in the altitude of the jet.
2. Jeff had  $\frac{1}{2}$  pizza left in the fridge. At breakfast, he ate  $\frac{1}{3}$  of it. What fraction of the original pizza does he have left for lunch?
3. Suppose that a, b and c are positive integers such that  $ab = 18$ ,  $bc = 24$  and  $ac = 48$ . What is the value of  $a + b + c$  ?
4. Find the least number which on dividing by 15, 20 and 40 leaves the remainder 9.
5. The pulse rate of a patient suffering from blood pressure suddenly shot up by 54 beats per minute. After taking some medicine, his pulse rate fell by 74 beats per minute. It again rose by 30 pulse per minute and stabilized. Find the net change in his pulse rate?
6. Add me to myself and multiply by 4. Divide me by 8 and your will have me once more. What number am I ?
7. There is a three digit number. The second digit is four times as big as the third digit, while the first digit is three less than the second digit. What is the number?
8. The maximum temperature of Kolkata city was recorded as  $44.6^{\circ}\text{C}$  and minimum temperature was recorded as  $33.9^{\circ}\text{C}$ . What is the difference in temperature?
9. If 3 men can do some construction work in 8 days, how long will 4 men take to complete the same work with the same ability?
10. How many envelopes of size 20cm x 30 cm can be made from a rectangular sheet of paper measuring 5 m x 3 m ?
11. In a lake, there is a patch of lily pads. Every day, the patch doubles in size. If it takes 48 days for the patch to cover the entire lake, how long would it take for the patch to cover half the lake?
12. Dev, Siva and Karthik are three brothers. Interestingly their current age is prime. What's more interesting is that the difference between their ages is also prime. How old are they?
13. A man is twice as old as his little sister. He is also half as old as their dad. Over a period of 50 years, the age of the sister will become half of their dad's age. What is the age of the man now?
14. What is the smallest number that increases by 12 when it is flipped and turned upside down?
15. There are a certain number of books on my bookshelf. I took a book which is 6<sup>th</sup> from the right and 4<sup>th</sup> from the left. Can you find out the number of books on my shelf?
16. Divide ₹1800 amongst Ashraf, bholanath and Chameli in the ratio 3 : 2 : 5.
17. In a pond, there are some flowers with some bees hovering over them. How many flowers and bees are there if both the following statements are true:
  - a. If each bee lands on a flower, one bee doesn't get a flower
  - b. If two bees share each flower, there is one flower left out.
18. A snail is at the bottom of a 20 metres deep pit. Every day the snail climbs 5 metres upwards, but at night it slides 4 metres back downwards. How many days does it take before the snail reaches the top of the pit?
19. What is the smallest whole number that is equal to seven times the sum of its digits?
20. In a seminar, the number of participants in three different categories are 60, 84 and 120 respectively. Find the minimum number of rooms required if in a room equal number of participants of each category can be seated.