

MATHEMATICS

While you enjoy the extended summer break, do find time to refresh your understanding by attempting the following questions which are based on the topics studied in the first term.

Take a print out of these sheets and write your answers on the sheet itself or answer the questions in your notebooks.

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I Find the sum in each of the following.

1 $7 + 8 + 4 - 2 =$

2 $2 - 4 + 9 - 5 =$

3 $5 - 5 - 8 - 3 + 5 =$

4 $6 + 5 - 7 + 1 - 2 =$

5 $7 - 9 - 4 + 7 + 5 =$

6 $9 - 8 - 7 - 6 + 6 + 5 =$

7 $12 + 6 - 7 - 8 =$

8 $25 - 60 - 20 + 55 =$

9 $1 - 2 - 3 + 4 - 5 + 6 =$

10 $22 - 54 + 35 - 53 =$

II Find the product :

11 $2.07 \times 5 =$

21 $2.001 \times 10 =$

12 $0.04 \times 3 =$

22 $31.003 \times 100 =$

13 $0.005 \times 2.1 =$

23 $2.005 \times 100 =$

14 $3.7 \times 0.8 =$

24 $0.05 \times 100 =$

15 $5.51 \times 7 =$

25 $3.07 \div 10 =$

16 $8.23 \times 0.3 =$

26 $189.35 \div 100 =$

17 $92.51 \times 2.3 =$

27 $52.3 \div 1000 =$

18 $6.05 \times 0.11 =$

28 $16.25 \times 1000 =$

19 $4.28 \times 3.1 =$

29 $5 \div 100 =$

20 $0.09 \times 3.9 =$

30 $7 \times 100 =$

III Write the prime factorizations of 468 and 1024.

MULTIPLY UPTO 20×20 IN YOUR HEAD!

With this trick you will be able to multiply any two numbers from 11 to 19 in your head quickly, without the use of a calculator.

- Take 15×13 for an example
- Always take the larger of the two numbers on top in your mind.
- Then draw the shape of Africa mentally so that it covers the 15 and the 3 from the 13 below. Those covered numbers are all that you need.

- First add $15 + 3 = 18$.
- Add a zero behind it(multiply by 10) to get 180.
- Multiply the covered lower 3 \times the single digit above it --- the '5'(3×5)
- Add $180 + 15 = 195$.

Easy! Wasn't it.

Now after having read and understood the above steps try at least 5 such products in the notebook and show your steps too.

I am sure you all have mastered the above trick.

Whack your brains a little more to solve this matchstick puzzle. (Consider the lines with arrows as matchsticks)
Move two matchsticks to create a shape with 5 squares in it.

Draw the answer shape below the given figure

