

Worksheet-9

Subject: - Mathematics

Class: - VI

Teacher: - Mrs. Poonam Sunil

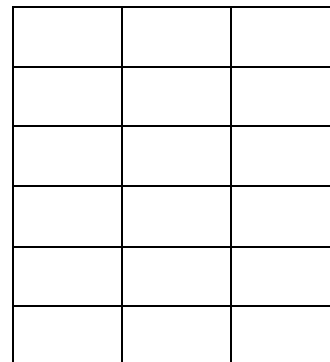
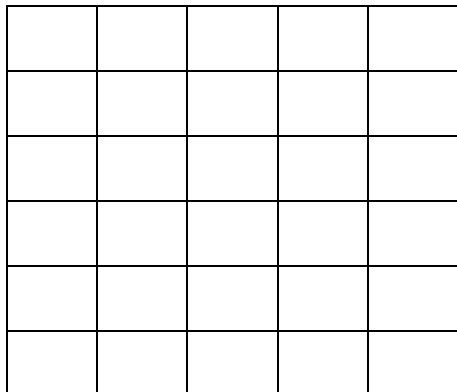
Name: _____ Class & Sec: _____ Roll No. _____ Date: 01.05.2020

Good Morning Students!

Today I am going to do property i.e. Distributive of multiplication over addition. (Take Graph paper)

Activity:

Cut the sheet into two piece of sizes 6 cm by 5cm and 6 cm by 3 cm as shown in the figure.

Number of squares: it is 6×5 , Number of squares: it is 6×3 ?

In all, how many squares are in both the pieces?

Is it $(6 \times 5) + (6 \times 3)$ it mean that 6×8 This shows that $6 \times (5 + 3) = (6 \times 5) + (6 \times 3)$?

This is known as distrivutivity of multiplcation over addition

Page 38

Example 5: The school canteen charges Rs. 20 for lunch and Rs 4 for milk for each day. How much money do you spend in 5 days on these things?**Sol:** This can be done by two methods.**Method I:** Find the amount for lunch for 5 days.

Find the amount for milk for 5 days

Then add i.e.

Cost of lunch = $5 \times 20 = \text{Rs } 100$ Cost of milk = $5 \times 4 = \text{Rs } 20$ Total cost = $\text{Rs } (100 + 20) = \text{Rs } 120$ **Method II:** Cost of (lunch + Milk) for one day = $\text{Rs } (20 + 4)$ Cost for 5 days = $\text{Rs } 5 \times (20 + 4) = \text{Rs } 5 \times 24 = \text{Rs } 120$

This example shows that

 $5 \times (20 + 4) = (5 \times 20) + (5 \times 4)$

This is the principal of distributivity of multiplication over addition.

Example 6: Find 12×35 using distributivity**Solution:** $12 \times 35 = 12 \times (30 + 5)$

$$= 12 \times 30 + 12 \times 5$$

$$= 360 + 60 = 420$$

Example 7: Simplfy : $126 \times 55 + 126 \times 45$ **Solution :** $= 126 \times 55 + 126 \times 45$

$$= 126 \times (55 + 45)$$

$$= 126 \times 100$$

$$= 12600 \text{ Ans}$$

Identify (for addition and Multiplication)

The number 'zero' has a special role in addition.

$7 + 0 =$	7
$5 + 0 =$	5
$0 + 15 =$	15
$0 + \dots =$

When you add zero to any whole number, the number will remain same.

We will get the same number.

Zero is called an identity for addition of whole number or additive identity for whole number.

Zero has a special role in multiplication. Any number when multiplied by zero become zero.

For example:

$$5 \times 1 = 5$$

$$7 \times 1 = 7$$

$$1 \times 12 = 12$$

$$1 \times 100 = 100$$

$$1 \times \dots = \dots$$

1 is the identity for multiplication for whole number or multiplicative identify for whole number or multiplicative identify for whole numbers.

REMEMBER: PROPERTIES OF WHOLE NUMBERS

1. Closure property
2. Commutative of Addition and Multiplication
3. Associativity of Addition and Multiplication
4. Distributive of multiplication over Addition
5. Identify (for Addition and Multiplication)

Note: Arrange one Graph paper next time.

Good afternoon children! Today's class is over. Next time we will do exercise 2.2

(Stay home and Stay Safe), Good Bye!