

ACTIVITY -11

TOPIC: RATIONAL NUMBERS

TITLE: PRODUCT OF TWO RATIONAL NUMBERS

1. **What we have to do?**

To compute the product of two rational numbers by paper folding. ($\frac{3}{4} \times \frac{2}{3}$)

2. **What is required?**

Rectangular paper strips, pencil colours, a pair of scissors, geometry box and adhesive.

3. **How much time is required?**

30 – 40 minutes

4. **What do you need to know?**

Knowledge about basic operations and concept of rational number

5. **How will you proceed?**

- a. Take a rectangular strip (as shown in Fig.1)

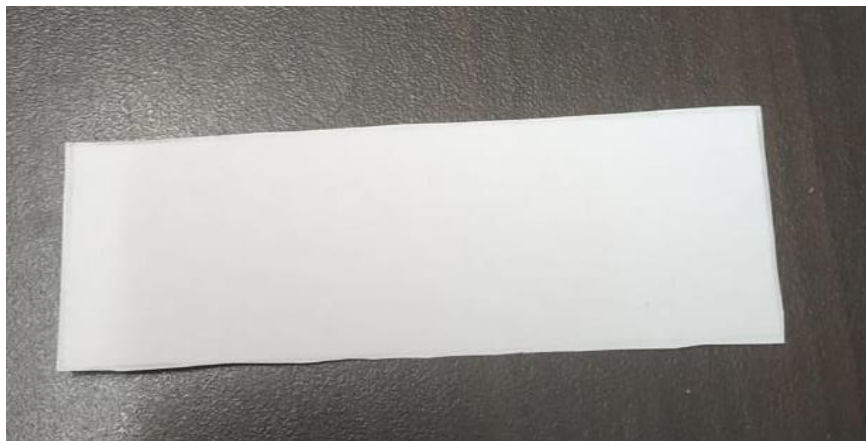


Fig.1

- b. Now, fold it into two halves vertically (as shown in Fig.2)



Fig.2

- c. Again, fold the paper strip vertically as shown in Fig.3.



Fig.3

- d. Unfold the strip to get four equal parts as shown in Fig.4.

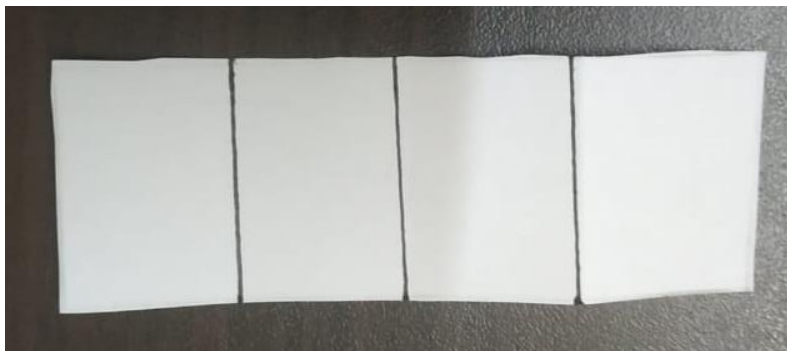


Fig.4

- e. To show first rational number $\frac{3}{4}$, shade the first three parts with green colour and fold the fourth unshaded part as shown in Fig.5

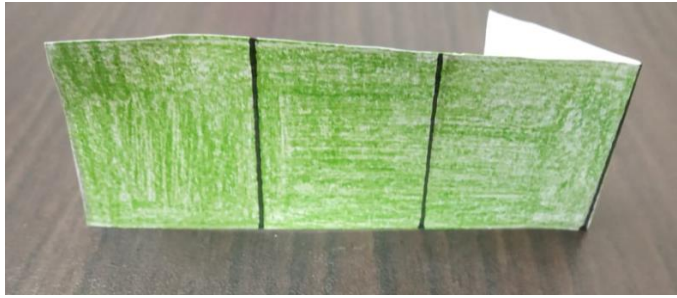


Fig.5

- f. Now, as the second rational number is $\frac{2}{3}$, now fold the strip horizontally to divide the strip into three parts, as shown in Fig.6



Fig.6

- g. Shade the first two horizontal parts out of the three parts with blue colour as shown in Fig.7

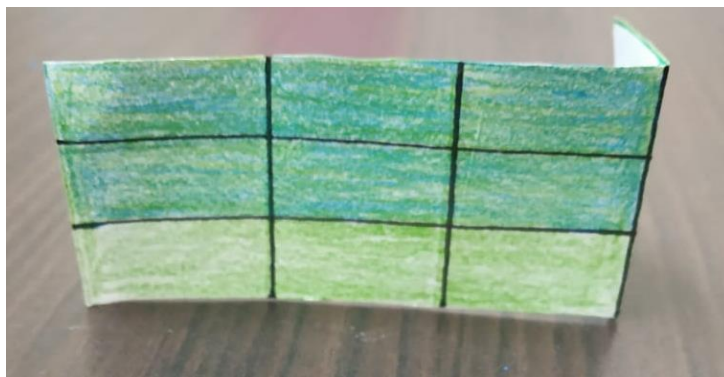


Fig.7

- h. Unfold the strip as shown in Fig.8

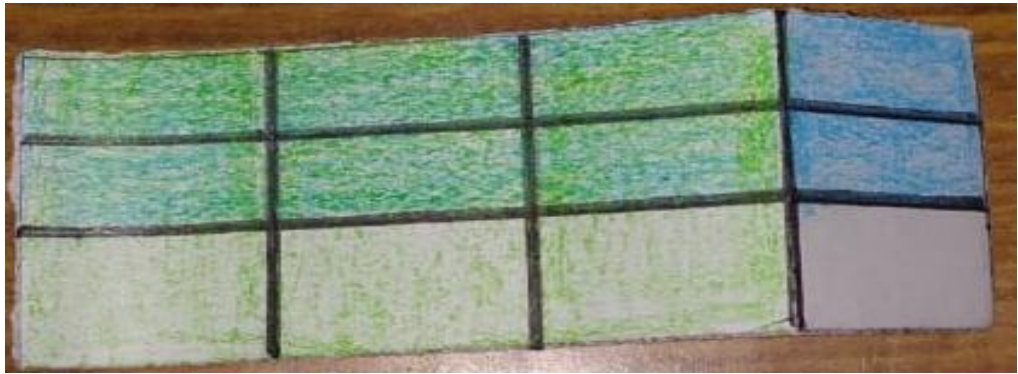


Fig. 8

6. **What have you observed?**

- The double - shaded region represents _____ part of the whole strip.

7. **What have you learnt?**

8. **Extended Activity**

Find the value of $\frac{3}{4} \times \frac{1}{2}$ by paper folding.

Real life Applications:

The above concept is used in our day-to-day life incidents viz. in banking operations, games, in baking, time, birthday parties etc....

