

rational numbers

Exercise 1.1

1. Name the property under multiplication used in each of the following:

i. $\frac{-4}{5} \times 1 = 1 \times \frac{-4}{5} = \frac{-4}{5}$

Ans: Since, after multiplying by 1, we are getting the same number. Therefore, 1 is the multiplicative identity.

ii. $-\frac{13}{17} \times \frac{-2}{7} = \frac{-2}{7} \times \frac{-13}{17}$

Ans: Since, a×b=b×a. Therefore, its Commutative property.

iii.
$$-\frac{19}{29} \times -\frac{29}{19} = 1$$

Ans: Since, $a \times a=1$. Therefore, the property is Multiplicative inverse.

2. Tell what property allows you to compute $\frac{1}{3} \times \left(6 \times \frac{4}{3}\right) \operatorname{as} \left(\frac{1}{3} \times 6\right) \times \frac{4}{3}$.

Ans: Since, $a \times (b \times c) = (a \times b) \times c$.

Therefore, its associative property.

3. The product of two rational numbers is always a ____.

(A) natural number

(B) rational number

(C) integer

(D) whole number

Ans: The correct option is B rational number

The product of two rational numbers is always a rational number.