MATHS

NCERT - NCERT MATHEMATICS(ENGLISH)

RATIONAL NUMBERS

Exercise 1 2

1. Find ten rational numbers between $\frac{-2}{5}$ and $\frac{1}{2}$.

Watch Video Solution

2. Find five rational numbers between. (i) $\frac{2}{3}$ and $\frac{4}{5}$ (ii) $\frac{-3}{2}$ and $\frac{5}{3}$ (iii) $\frac{1}{4}$ and $\frac{1}{2}$

Watch Video Solution

3. Write five rational numbers greater than 2.

Watch Video Solution

4. Find ten rational numbers between $\frac{3}{5}$ and $\frac{3}{4}$

Watch Video Solution

5. Represent these numbers on the number line. (i) $\frac{7}{4}$ (ii) $\frac{-5}{6}$

Watch Video Solution

6. Represent $\frac{-2}{11}, \frac{-5}{11}, \frac{-9}{11}$ on the number line.

Watch Video Solution

7. Write five rational numbers which are smaller than 2.

Watch Video Solution

Solved Examples

1. Find $\frac{-4}{5} \times \frac{3}{7} \times \frac{15}{16} \times \left(\frac{-14}{9}\right)$

A. $\frac{2}{6}$

B. $\frac{2}{8}$

C. $\frac{2}{10}$

D. $\frac{1}{2}$

Answer: D

Watch Video Solution

2. Write the additive inverse of the following:

(i) $\frac{-7}{19}$ (ii) $\frac{21}{112}$

Watch Video Solution

3. Verify that $(-x)$ is the as x for (i) $x = \frac{13}{17}$

(ii) $x = \frac{-21}{31}$

Watch Video Solution

4. Find $\frac{2}{5} \times \frac{-3}{7} - \frac{1}{14} - 37 \times \frac{3}{5}$

Watch Video Solution

5. Find $\frac{3}{7}+\left(\frac{-6}{11}\right)+\left(\frac{-8}{21}\right)+\left(\frac{5}{22}\right)$

Watch Video Solution

6. Write any 3 rational numbers between and 0.

Watch Video Solution

7. Find any ten rational numbers between $\frac{-5}{6}$ and $\frac{5}{8}$.

Watch Video Solution

8. Find a rational number between $\frac{1}{4}$ and $\frac{1}{2}$.

Watch Video Solution

9. Find three rational numbers between $\frac{1}{4}$ and $\frac{1}{2}$.

Watch Video Solution

Exercise 1 1

1. Multiply $\frac{6}{13}$ by the reciprocal of $\frac{-7}{16}$.

A. $-\frac{96}{91}$

B. $-\frac{34}{91}$

C. $\frac{96}{91}$

D. $\frac{34}{91}$

Answer: A

Watch Video Solution

2. Write.(i) The rational number that does not have a reciprocal.(ii) The rational numbers that are equal to their reciprocals.(iii) The rational number that is equal to its negative.

Watch Video Solution

3. Fill in the blanks. (i) Zero has reciprocal. (ii) The numbers and are their own reciprocals (iii)

The reciprocal of (-5) is. (iv) Reciprocal of $\frac{1}{x}$, where $x \neq 0$ is. (v) The product of two rational numbers is always a. (vi) The reciprocal of a positive rational number is.

Watch Video Solution

4. Using appropriate properties find. (i) $-\frac{2}{5} \times \frac{3}{5} + \frac{5}{2} - \frac{3}{5} \times \frac{1}{6}$ (ii) $\frac{2}{5} \times \left(-\frac{3}{7}\right) - \frac{1}{6} \times \frac{3}{2} + \frac{1}{14} \times \frac{2}{5}$

Watch Video Solution

5. Name the property under multiplication used in each of the following. (i) $\frac{-4}{5} \times 1 = 1 \times \frac{-4}{5}$ (ii) $\frac{13}{17} \times \frac{-2}{7} = \frac{-2}{7} \times \frac{-13}{17}$ (iii) $\frac{-19}{29} \times \frac{29}{-19} =$

Watch Video Solution

6. Find the multiplicative inverse of the following. (i) -13 (ii) $\frac{-13}{19}$ (iii) $\frac{1}{5}$ (iv) $\frac{-5}{8} \times \frac{-3}{7}$ (v) $-1 \times \frac{-2}{5}$ (vi) -1

Watch Video Solution

7. Tell what property allows you to compute $\frac{1}{3} \times \left(6 \times \frac{4}{5}\right) as \left(\frac{1}{3} \times 6\right) \times \frac{4}{3}$.

Watch Video Solution

8. Verify that $(-x) = x$ for .(i) $x = \frac{11}{15}$ (ii) $x = -\frac{13}{17}$

Watch Video Solution

9. Write the additive inverse of each of the following. (i) $\frac{2}{8}$ (ii) $\frac{-5}{9}$ (iii) $\frac{-6}{-5}$ (iv) $\frac{2}{-9}$ (v) $\frac{19}{-6}$

Watch Video Solution

10. Is 0.3 the multiplicative inverse of $(3)\frac{1}{3}$?

Why or why not?

Watch Video Solution

11. Is $\frac{8}{9}$ the multiplicative inverse of $-1\frac{1}{8}$?

Why or Why Not?

Watch Video Solution