Rational Numbers Ex 4.4 Q1

Answer :

(i) The denominator is positive and HCF of 2 and 10 is 2.

$\therefore$ Dividing the numerator and denominator by 2, we get:

$$\frac{2}{10} = \frac{2/2}{10/2} = \frac{1}{5}$$

(ii) The denominator is positive and HCF of 8 and 36 is 4.

$\therefore$ Dividing the numerator and denominator by 4, we get:

$$\frac{-8}{36} = \frac{-8/4}{36/4} = \frac{-2}{9}$$

(iii)

The denominator is negative.

$$\frac{4\times-1}{-16\times-1} = \frac{-4}{16}$$

HCF of 4 and 16 is 4.

$\therefore$ Dividing the numerator and denominator by 4, we get:

$$\frac{-4/4}{16/4} = \frac{-1}{4}$$

(iv) The denominator is negative.

$$\frac{-15\times-1}{-35\times-1} = \frac{15}{35}$$

HCF of 15 and 35 is 5.

∴ Dividing the numerator and denominator by 5, we get:

$$\frac{15/5}{35/5} = \frac{3}{7}$$

(v) The denominator is negative.

$$\frac{299\times-1}{-161\times-1} = \frac{-299}{161}$$

HCF of 299 and 161 is 23.

∴ Dividing the numerator and denominator by 23, we get:

$$\frac{-299/23}{161/23} = \frac{-13}{7}$$

(vi) The denominator is negative.

$$\frac{-63\times-1}{-210\times-1} = \frac{63}{210}$$

HCF of 63 and 210 is 21.

∴ Dividing the numerator and denominator by 21, we get:

$$\frac{63/21}{210/21} = \frac{3}{10}$$

(vii) The denominator is negative.

$$\frac{68\times-1}{-119\times-1} = \frac{-68}{119}$$

HCF of 68 and 119 is 17.

∴ Dividing the numerator and denominator by 17, we get:

$$\frac{-68/17}{119/17} = \frac{-4}{7}$$

(viii) The denominator is positive and HCF of 195 and 275 is 5.

∴ Dividing divide the numerator and denominator by 5, we get:

$$\frac{-195/5}{275/5} = \frac{-39}{55}$$

********** END **********