Exercise 4A

$\Rightarrow 13x=6\times(-65)$

$\Rightarrow x=\frac{6\times(-65)}{13}$

$\Rightarrow x=6\times(-5)$

$\Rightarrow x=-30$

(v) $\frac{16}{x}=-4$

$\Rightarrow \mathbf{x}=\frac{16}{(-4)}$

$\Rightarrow x=(-4)$

vi) $\frac{-48}{x}=2$

$\Rightarrow \frac{-48}{2}=\frac{x}{1}$

$\Rightarrow 2x=(-48)\times 1$

$\Rightarrow x=\frac{-48}{2}$

$x=(-24)$

Q21

Answer :

(i) $\frac{8}{-12}$ and $\frac{-10}{15}$

$8\times 15=120$

And $(-10)\times(-12)=120$

$8\times 15=(-10)\times(-12)$

$\therefore \frac{8}{-12} = \frac{-10}{15}$

Therefore, the rational numbers are equal.

ii) $\frac{-3}{9}, \frac{7}{-21}$

$(-3)\times(-21) = 63$
And $7\times 9 = 63$

$\therefore (-3)\times(-21) = 7\times 9$

$\frac{-3}{9} = \frac{7}{-21}$

Therefore, the rational numbers are equal.

(iii) $\frac{-8}{-14}, \frac{15}{21}$

$(-8) \times 21 = -168$
And $15 \times(-14) = -210$

$(-8) \times 21 \neq 15 \times 14$

Therefore, the rational numbers are not equal.

Q22

Answer :

(i) False
For example, −1 is smaller than zero and is a rational number.
(ii)True
All integers can be written with the denominator 1.
(iii) False
Though 0 is an integer, when the denominator is 0, it is not a rational number.
For example, $\frac{1}{0}$ is not a rational number.
(iv)True
(v) False
−1 is a rational number but not a fraction.

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