



Exercise 1A

Q1

Answer :

If $\frac{a}{b}$ is a fraction and m is a non-zero integer, then $\frac{a}{b} = \frac{a \times m}{b \times m}$.

Now,

$$(i) \frac{-3}{5} = \frac{-3 \times 4}{5 \times 4} = \frac{-12}{20}$$

$$(ii) \frac{-3}{5} = \frac{-3 \times -6}{5 \times -6} = \frac{18}{-30}$$

$$(iii) \frac{-3}{5} = \frac{-3 \times 7}{5 \times 7} = \frac{-21}{35}$$

$$(iv) \frac{-3}{5} = \frac{-3 \times -8}{5 \times -8} = \frac{24}{-40}$$

Q2

Answer :

If $\frac{a}{b}$ is a rational number and m is a common divisor of a and b , then $\frac{a}{b} = \frac{a \div m}{b \div m}$.

$$\therefore \frac{-42}{98} = \frac{-42 \div 14}{98 \div 14} = \frac{-3}{7}$$

Q3

Answer :

If $\frac{a}{b}$ is a rational integer and m is a common divisor of a and b , then $\frac{a}{b} = \frac{a \div m}{b \div m}$.

$$\therefore \frac{-48}{60} = \frac{-48 \div 12}{60 \div 12} = \frac{-4}{5}$$

Q4

Answer :

A rational number $\frac{a}{b}$ is said to be in the standard form if ***a*** and ***b*** have no common divisor other than unity and ***b*** > 0.

Thus,

(i) The greatest common divisor of 12 and 30 is 6.

$$\therefore \frac{-12}{30} = \frac{-12 \div 6}{30 \div 6} = \frac{-2}{5} \text{ (In the standard form)}$$

(ii) The greatest common divisor of 14 and 49 is 7.

$$\therefore \frac{-14}{49} = \frac{-14 \div 7}{49 \div 7} = \frac{-2}{7} \text{ (In the standard form)}$$

$$(iii) \frac{24}{-64} = \frac{24 \times (-1)}{-64 \times -1} = \frac{-24}{64}$$

The greatest common divisor of 24 and 64 is 8.

$$\therefore \frac{-24}{64} = \frac{-24 \div 8}{64 \div 8} = \frac{-3}{8} \text{ (In the standard form)}$$

$$(iv) \frac{-36}{-63} = \frac{-36 \times (-1)}{-63 \times -1} = \frac{36}{63}$$

The greatest common divisor of 36 and 63 is 9.

$$\therefore \frac{36}{63} = \frac{36 \div 9}{63 \div 9} = \frac{4}{7} \text{ (In the standard form)}$$

Answer :

If $\frac{a}{b}$ is a rational integer and ***m*** is a common divisor of ***a*** and ***b***, then $\frac{a}{b} = \frac{a \div m}{b \div m}$.

$$\therefore \frac{-48}{60} = \frac{-48 \div 12}{60 \div 12} = \frac{-4}{5}$$

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