

**RD SHARMA**

**Solutions**

**Class 7 Maths**

**Chapter 4**

**Ex 4.3**

**Q 1. Determine whether the following rational numbers are in the lowest form or not :**

(i)  $\frac{65}{84}$

(ii)  $\frac{-15}{32}$

(iii)  $\frac{24}{128}$

(iv)  $\frac{-56}{-32}$

**SOLUTION :**

(i) We observe that 65 and 84 have no common factor their HCF is 1 .

Thus , 65/84 is in its lowest form .

(ii) We observe that -15 and 32 have no common factor i.e., their HCF is 1 .

Thus , -15/32 is in its lowest form .

(iii) HCF of 24 and 128 is not 1 .

Thus , given rational number is not in its simplest form .

(iv) HCF of 56 and 32 is 8 .

Thus , given rational number is not in its simplest form .

**Q 2. Express each of the following numbers to the lowest form :**

(i)  $\frac{4}{22}$

(ii)  $\frac{-36}{180}$

(iii)  $\frac{132}{428}$

(iv)  $\frac{-32}{-56}$

**SOLUTION :**

Lowest form of :

(i) 4/22 is :

$$4 = 2 \times 2, 22 = 2 \times 11$$

HCF of 4 and 22 is 2 .

Dividing the fraction by 2 , we get 2/11.

(ii) -36/180 is :

$$36 = 3 \times 3 \times 2 \times 2, 180 = 5 \times 3 \times 3 \times 2 \times 2$$

HCF of 36 and 180 is 36 .

Dividing the fraction by 36 , we get -1/5 .

(iii) 132/-428 is :

$$132 = 2 \times 3 \times 2 \times 11, 428 = 2 \times 2 \times 107$$

HCF of 132 and 428 is 4 .

Dividing the fraction by 4 , we get 33/-107 .

(iv) -32/-56 is :

$$32 = 2 \times 2 \times 2 \times 2 \times 2, 56 = 2 \times 2 \times 2 \times 7$$

HCF of 32 and 56 is 8 .

Dividing the fraction by 8 , we get 4/7 .

**Q 3. Fill in the blanks :**

(i)  $\frac{-5}{7} = \frac{\dots}{35} = \frac{\dots}{49}$

(ii)  $\frac{-4}{-9} = \frac{\dots}{18} = \frac{12}{\dots}$

(iii)  $\frac{6}{-13} = \frac{-12}{\dots} = \frac{24}{\dots}$

(iv)  $\frac{-6}{\dots} = \frac{3}{11} = \frac{\dots}{-55}$

**SOLUTION :**

(i) Here ,  $(-5 \times 5)/(7 \times 5) = -25/35$

Also ,  $(-5 \times 7)/(7 \times 70) = -35/49$  .

Therefore ,  $-5/7 = -25/35 = -35/49$

(ii) Here ,  $(-4x-2)/(-9x-2) = 8/18$

Also ,  $(-4x-3)/(-9x-3) = 12/27$

Therefore ,  $-4/-9 = 8/18 = 12/27$

(iii) Here ,  $(6x-2)/(-13x-2) = -12/26$

Also ,  $(6 \times 4)/(-13 \times 4) = 24/-52$

Therefore ,  $6/-13 = -12/26 = 24/-52$

(iv) Here ,  $(-6 \times 2)/(-22 \times 2) = 3/11$

Also ,  $-6/-22 = (3x-5)/(11x-5) = 45/-55$

Therefore ,  $-6/-22 = 3/11 = -15/-55$