

RD Sharma
Solutions

Class 7

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Exercise 4.4

Q.1 Write each of the following rational numbers in the standard form:

(i) $\frac{2}{10}$

(ii) $\frac{-8}{36}$

(iii) $\frac{4}{-16}$

(iv) $\frac{-15}{-35}$

(v) $\frac{299}{-161}$

(vi) $\frac{-63}{-210}$

(vii) $\frac{68}{-119}$

(viii) $\frac{-195}{275}$

Solution: (i) $\frac{2}{10}$, here HCF of 2 and 10 is 2.

$$\text{So, } \frac{2}{10} = \frac{2 \div 2}{10 \div 2} = \frac{1}{5}$$

hence standard form of $\frac{2}{10}$ is $\frac{1}{5}$.

(ii) $\frac{-8}{36}$, here HCF of 8 and 36 is 4, so by

dividing numerator and denominator by 4, we get

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

(iii) $\frac{4}{-16}$, here, denominator is negative, so first

we convert it in positive by multiplying numerator and denominator by -1 , we get

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

here HCF of 4 and 16 is 4.

$$\text{So, } \frac{-4 \div 4}{16 \div 4} = \frac{-1}{4}$$

(iv) $\frac{-15}{-35}$, here denominator is negative, so to make it positive,

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

Now HCF of 15 and 35 is 5, so

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

hence, standard form of $\frac{-15}{-35}$ is $\frac{3}{7}$.

(v) $\frac{299}{-161}$, here, denominator is negative, to make it positive, we do

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

here, HCF of 299 and 161 is 23, so

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

(vi) $\frac{-63}{-210}$, here denominator is negative, to make

it positive, we do, $\frac{-63}{-210} \times \frac{-1}{-1} = \frac{63}{210}$

$\therefore$ HCF of 63 and 210 is 21, we get

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

(vi) $\frac{68}{-119}$, here denominator is negative, so first we make it positive by

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

Again, HCF of 68 and 119 is 17, so,

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

(vii) $-\frac{195}{275}$, here, HCF of 195 and 275 is 5, so

$$\text{we get } \frac{-195 \div 5}{275 \div 5} = -\frac{39}{55}$$

So, standard form of $-\frac{195}{275}$ is $-\frac{39}{55}$