24.8.21 Tuesday

Chapter-9

Fractions

Date
Page

Exercise-9 (A)

3. Reduce the following ~~to~~ fractions to their lowest term.

a) $\frac{68}{136}$

Solution:

$$\frac{\cancel{68}^{34}}{\cancel{136}_{68}} = \frac{\cancel{34}^{17}}{\cancel{68}_{34}} = \frac{\cancel{17}^{1}}{\cancel{34}_{2}} = \frac{1}{2}$$

$\therefore \frac{68}{136} = \frac{1}{2}$

b) $\frac{102}{119}$

Solution:

$$\frac{102 \div 17}{119 \div 17} = \frac{6}{7}$$

$\therefore \frac{102}{119} = \frac{6}{7}$

c) $\frac{153}{204}$

Solution:

$$\frac{153^{51}}{204_{68}} = \frac{51^{3}}{68_{4}} = \frac{3}{4}$$

$$\therefore \frac{153}{204} = \frac{3}{4}$$

d) $\frac{129}{243}$

Solution:

$$\frac{129 \div 3}{243 \div 3} = \frac{43}{81}$$

$$\therefore \frac{129}{243} = \frac{43}{81}$$

e) $\frac{154}{238}$

Solution:

$$\frac{154^{77}}{238_{119}} = \frac{77^{11}}{119_{17}} = \frac{11}{17}$$

$\therefore \frac{154}{238} = \frac{11}{17}$

f) $\frac{198}{297}$

Solution:-

$$\frac{198 \div 9}{297 \div 9} = \frac{22 \div 11}{33 \div 11} = \frac{2}{3}$$

$\therefore \frac{198}{297} = \frac{2}{3}$

g) $\frac{117}{189}$

Solution:

$\frac{117 \div 9}{189 \div 9} = \frac{13}{21}$

$\therefore \frac{117}{189} = \frac{13}{21}$

h) $\frac{304}{368}$

Solution:

$\frac{304 \div 4}{368 \div 4} = \frac{76 \div 4}{92 \div 4} = \frac{19}{23}$

$\therefore \frac{304}{368} = \frac{19}{23}$

Exercise - 9 (A)

3. Reduce the following fractions to their lowest form :-

i) $\frac{115}{345}$

Solution:

$$\frac{115 \div 5}{345 \div 5} = \frac{23 \div 23}{69 \div 23} = \frac{1}{3}$$

$$\therefore \frac{115}{345} = \frac{1}{3}$$

j) $\frac{160}{720}$

Solution:

$$\frac{160 \div 2}{720 \div 2} = \frac{80 \div 2}{360 \div 2} = \frac{40 \div 2}{180 \div 2} = \frac{20 \div 2}{90 \div 2} = \frac{10 \div 5}{45 \div 5} = \frac{2}{9}$$

$$\therefore \frac{160}{720} = \frac{2}{9}$$

4. Tick (✓) the fractions which are proper fractions.

a) $\frac{13}{16}$ ☑

b) $\frac{8}{7}$ ☐

c) $\frac{17}{8}$ ☐

d) $\frac{23}{25}$ ☑

e) $\frac{38}{4}$ ☐

f) $\frac{48}{50}$ ☑

g) $\frac{25}{21}$ ☐

h) $\frac{1}{7}$ ☑

i) $\frac{45}{9}$ ☐

j) $\frac{63}{65}$ ☑