Thu
08/09/2022

Date
Page 71

Exercise - 9(D)

1. Divide:

e. $\frac{22}{25} \div \frac{11}{15}$

$= \frac{\cancel{22}^{2}}{\cancel{25}_{5}} \times \frac{\cancel{15}^{3}}{\cancel{11}_{1}} = \frac{6}{5} = 1\frac{1}{5}$

f. $\frac{26}{27} \div \frac{13}{15}$

$= \frac{\cancel{26}^{2}}{\cancel{27}_{9}} \times \frac{\cancel{15}^{5}}{\cancel{13}_{1}} = \frac{10}{9} = 1\frac{1}{9}$

g. $45 \div \frac{3}{8}$

$= \frac{\overset{15}{\cancel{45}}}{1} \times \frac{8}{\cancel{3}_{1}} = \frac{120}{1} = 120$

h. $91 \div \frac{26}{27}$

$= \frac{\cancel{91}^{7}}{1} \times \frac{27}{\cancel{26}_{2}} = \frac{161}{2} = 80\frac{1}{2}$

i. $12\frac{4}{15} \div 2\frac{1}{27}$

$= \frac{184}{15} \div \frac{55}{27}$

$= \frac{184}{\cancel{15}_{5}} \times \frac{27^{9}}{55} = \frac{1656}{275} = 6\frac{6}{275}$

ii. $4\frac{2}{3} \div 1\frac{1}{2} \div 1\frac{2}{3}$

$= \frac{14}{3} \div \frac{3}{2} \div \frac{5}{3}$

$= \frac{14}{3} \times \frac{2}{\cancel{3}_{1}} \times \frac{\cancel{3}^{1}}{5} = \frac{8}{15}$

2. Find the quotient in its simplest form:

c. $\dfrac{\frac{8}{15}}{\frac{35}{36}}$

$= \frac{8}{\cancel{15}_{5}} \times \frac{\overset{12}{\cancel{36}}}{35} = \frac{96}{175}$

d. $\dfrac{\frac{12}{17}}{5}$

$= \frac{12}{17} \times \frac{1}{5} = \frac{12}{85}$

e. $\dfrac{\frac{8}{6}}{7}$

$= \frac{\cancel{8}^{4}}{\cancel{6}_{3}} \times \frac{1}{7} = \frac{4}{21}$

f. $\dfrac{\frac{2}{19}}{4}$

$= \frac{\cancel{2}^{1}}{19} \times \frac{1}{\cancel{4}_{2}} = \frac{1}{38}$

g. $\dfrac{\frac{7}{9}}{28}$

$= \frac{\cancel{7}^{1}}{9} \times \frac{1}{\cancel{28}_{4}} = \frac{1}{36}$

b. $\frac{\frac{5}{3}}{10}$

$= \frac{5^{1}}{3} * \frac{1}{\cancel{10}_{2}} = \frac{1}{6}$

ii. $\frac{\cancel{20}}{\cancel{15}} \quad \frac{20}{\frac{7}{15}}$

$= \frac{20}{1} \times \frac{15}{7} = \frac{300}{7} = 42\frac{6}{7}$

j. $\frac{10}{1\frac{2}{3}}$

$= \frac{10}{1} \div \frac{5}{3}$

$= \frac{\cancel{10}^{2}}{1} \times \frac{3}{\cancel{5}_{1}} = \frac{6}{1} = 6$

k. $\frac{24}{3\frac{1}{3}}$

$= \frac{24}{1} \div \frac{10}{3}$

$= \frac{24}{1} \times \frac{3}{10} = \frac{72}{10} = \frac{36}{5} = 6\frac{6}{5}$

1. $\frac{3\frac{3}{4}}{1\frac{1}{2}}$

$= \frac{15}{4} \div \frac{3}{2}$

$= \frac{\cancel{15}^{5}}{\cancel{4}_{2}} \times \frac{\cancel{2}^{1}}{\cancel{3}_{1}} = \frac{5}{2} = 2\frac{1}{2}$