Exercise 5G

Q1

Answer :

(c) $\frac{3 \times 2}{5 \times 2}$

Q2

Answer :

(c) $\frac{8 \div 4}{12 \div 4}$

Q3

Answer :

$\left(\mathrm{b}\right) \frac{2}{3}$

Factors of 24 are 1, 2, 3, 4, 6, 8, 12, 24.

Factors of 36 are 1, 2, 3, 4, 6, 9, 12, 18, 36.

Common factors of 24 and 36 are 1, 2, 3, 4, 6, 12.

H.C.F. $= 12$

Dividing both the numerator and the denominator by 12 :

$\frac{24}{36}$

$= \frac{24 \div 12}{36 \div 12}$

$= \frac{2}{3}$

Q1

Answer :

(c) $\frac{3 \times 2}{5 \times 2}$

Q2

Answer :

(c) $\frac{8 \div 4}{12 \div 4}$

Q3

Answer :

(b) $\frac{2}{3}$

Factors of 24 are 1, 2, 3, 4, 6, 8, 12, 24.

Factors of 36 are 1, 2, 3, 4, 6, 9, 12, 18, 36.

Common factors of 24 and 36 are 1, 2, 3, 4, 6, 12.

H.C.F. $= 12$

Dividing both the numerator and the denominator by 12 :

$\frac{24}{36}$

$= \frac{24 \div 12}{36 \div 12}$

$= \frac{2}{3}$

Q4

Answer :

(a) 15

Explanation:

$\left(\frac{3}{4} = \frac{x}{20}\right)$

We have :

$20 = 4 \times 5$

So, we have to multiply the numerator by 5.

$\therefore x = 3 \times 5 = 15$

Q5

Answer :

(a) 4

Explanation:

$\left(\frac{45}{60} = \frac{3}{x}\right)$

Now, $3 = 45 \div 15$

So, we have to divide the denominator by 15.

$\therefore x = 60 \div 15 = 4$

Q6

Answer :

(c) $\frac{1}{8}, \frac{3}{8}, \frac{5}{8}, \frac{7}{8}$

(Fractions having the same denominator are called like fractions.)

Q7

Answer :

(d) none of these

In a proper fraction, the numerator is less than the denominator.

Q8

Answer :

(a) $\frac{7}{8}$

In a proper fraction, the numerator is less than the denominator.

Q9

Answer :

(b) $\frac{3}{4} > \frac{3}{5}$

Between the two fractions with the same numerator, the one with the smaller denominator is the greater.

Q10

Answer :

(c) $\frac{3}{5}$

$$
\begin{array}{r|l}
2 & 5,\ 3,\ 6,\ 10 \\
\hline
5 & 5,\ 3,\ 3\ ,\ 5 \\
\hline
3 & 1,\ 3,\ 3,\ 1 \\
\hline
 & 1,\ 1,\ 1,\ 1
\end{array}
$$

L.C.M. of 5, 3, 6 and 10 = (2 × 3 × 5) = 30

Thus, we have:

$$\frac{3}{5} = \frac{3 \times 6}{5 \times 6} = \frac{18}{30}$$

$$\frac{2}{3} = \frac{2 \times 10}{3 \times 10} = \frac{20}{30}$$

$$\frac{5}{6} = \frac{5 \times 5}{6 \times 5} = \frac{25}{30}$$

$$\frac{7}{10} = \frac{7 \times 3}{10 \times 3} = \frac{21}{30}$$

$$\therefore \text{ The smallest fraction } = \frac{18}{30} = \frac{3}{5}$$

Q11

Answer :

********** END **********