

Exercise 5D

- (i) >
- (ii) >
- (iii)<
- (iv) >
- (V) <
- (vi) >

Q6

Answer:

 $\frac{4}{5}$, $\frac{5}{7}$

By cross multiplying:

$$5 \times 5 = 25$$
 and $4 \times 7 = 28$

Clearly, 28 > 25

$$\therefore \frac{4}{5} > \frac{5}{7}$$

Q7

Answer:

 $\frac{3}{8}$, $\frac{5}{6}$

By cross multiplying:

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$$3 \times 6 = 18$$
 and $5 \times 8 = 40$

Clearly, 18 < 40

$$\therefore \frac{3}{8} < \frac{5}{6}$$

Q8

Answer:

$$\frac{7}{11}$$
 , $\frac{6}{7}$

By cross multiplying:

$$7 \times 7 = 49$$
 and $11 \times 6 = 66$

Clearly, 49 < 66

$$\therefore \frac{7}{11} < \frac{6}{7}$$

Q9

Answer:

$$\frac{7}{11}$$
, $\frac{6}{7}$

By cross multiplying:

$$5 \times 11 = 55$$
 and $9 \times 6 = 54$

Clearly, 55 > 54

$$\therefore \frac{5}{6} > \frac{9}{11}$$

Q10

Answer:

$$\frac{7}{11}$$
, $\frac{6}{7}$

By cross multiplying:

$$2 \times 9 = 18$$
 and $4 \times 3 = 12$

Clearly, 18 > 12

$$\therefore \frac{2}{3} > \frac{4}{9}$$

Q11

Answer:

$$\frac{6}{13}$$
 , $\frac{3}{4}$

By cross multiplying:

$$6 \times 4 = 24$$
 and $13 \times 3 = 39$

Clearly, 24 < 39

$$\therefore \frac{6}{13} < \frac{3}{4}$$

Q12

Answer:

$$\frac{6}{13}$$
, $\frac{3}{4}$

By cross multiplying:

$$3 \times 6 = 18$$
 and $4 \times 5 = 20$

Clearly, 18 < 20

$$\frac{3}{4} < \frac{5}{6}$$

Q13

Answer:

$$\frac{5}{8}$$
, $\frac{7}{12}$

By cross multiplying:

$$5 \times 12 = 60$$
 and $8 \times 7 = 56$

Clearly, 60 > 56

$$\therefore \frac{5}{8} > \frac{7}{12}$$

Q14

Answer:

L.C.M. of 9 and 6 = $(3 \times 3 \times 2)$ = 18 Now, we convert $\frac{4}{9}$ and $\frac{5}{6}$ into equivalent fractions having 18 as the denominator. $\therefore \frac{4}{9} = \frac{4 \times 2}{9 \times 2} = \frac{8}{18} \text{ and } \frac{5}{6} = \frac{5 \times 3}{6 \times 3} = \frac{15}{18}$

Clearly,
$$\frac{8}{18} < \frac{15}{18}$$

 $\therefore \frac{4}{9} < \frac{5}{6}$

Q15

Answer: