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

Among the given fractions with the same numerator, the one with the smallest denominator is the greatest.

Q12

Answer :

(a) $\frac{6}{11}$

Among like fractions, the fraction with the smallest numerator is the smallest.

Q13

Answer :

(d) $\frac{7}{12}$

Explanation:

$$
\begin{array}{r|l}
2 & 4,\ 6,\ 12,\ 3 \\
\hline
2 & 2,\ 3,\ 6,\ 3 \\
\hline
3 & 1,\ 3,\ 3,\ 3 \\
\hline
 & 1,\ 1,\ 1,\ 1
\end{array}
$$

L.C.M. of 4, 6, 12 and 3 = (2 × 2 × 3) = 12

Thus, we have:

$\frac{3}{4} = \frac{3 \times 3}{4 \times 3} = \frac{9}{12}$

$\frac{5}{6} = \frac{5 \times 2}{6 \times 2} = \frac{10}{12}$

$\frac{2}{3} = \frac{2 \times 4}{3 \times 4} = \frac{8}{12}$

$\frac{7}{12}$

Clearly, $\frac{7}{12}$ is the smallest fraction.

Q14

Answer :

(b) $\frac{23}{5}$

Q15

Answer :

(c) $4\frac{6}{7}$

On dividing 34 by 7:

Quotient = 4

Remainder = 6

$\frac{34}{7} = 4 + \frac{6}{7} = 4\frac{6}{7}$

Q16

Answer :

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

Explanation:

Addition of like fractions = Sum of the numerators / Common denominator

$= \frac{5}{8} + \frac{1}{8} = \frac{(5+1)}{8} = \frac{\cancel{6}^2}{\cancel{8}_4} = \frac{3}{4}$

Q17

Answer :

(b) $\frac{1}{2}$

Explanation:

$\frac{5}{8} - \frac{1}{8} = \frac{(5-1)}{8} = \frac{\cancel{4}^1}{\cancel{8}_2} = \frac{1}{2}$

Q18

Answer :

$(a)\ 1\frac{1}{2}$

Explanation :

$$3\frac{3}{4} \ - \ 2\frac{1}{4}$$
$$\Rightarrow \ \frac{15}{4} \ - \ \frac{9}{4}$$
$$\Rightarrow \ \frac{(15-9)}{4}$$
$$\Rightarrow \ \frac{6}{4} \ = \ \frac{3}{2} \ = \ 1\frac{1}{2}$$

Q19

Answer :

(d) $1\frac{1}{18}$

Explanation:

3	3, 6, 9
2	1, 2, 3
3	1, 1, 3
	1, 1, 1

$\frac{5}{6} \ + \ \frac{2}{3} \ - \ \frac{4}{9}$ $\left(\text{L.C.M. of 3, 6 and 9} = (2 \times 3 \times 3) = 18 \right)$

$= \ \frac{(15 + 12 - 8)}{18}$

$\{[18 \div 6 = 3, \ 3 \times 5 = 15], \ [18 \div 3 = 6, \ 6 \times 2 = 12] \ \text{and} \ [18 \div 9 = 2, \ 2 \times 4 = 8]\}$

$= \ \frac{(27 - 8)}{18} \ = \ \frac{19}{18} \ = \ 1\frac{1}{18}$

Q20

Answer :

(a) $3\frac{1}{3}$

Explanation:

Let us compare $3\frac{1}{3}$ and $\frac{33}{10}$ or $\frac{10}{3}$ and $\frac{33}{10}$.

10 × 10 = 100 and 3 × 33 = 99

Clearly, 100 > 99

∴ $\frac{10}{3} > \frac{33}{10}$ or $3\frac{1}{3} > \frac{33}{10}$

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