

FRACTIONS

Do **not** use a calculator. **Show all working.**

In questions 2 to 4 express your answers as common fractions in **simplest** form.

1. Evaluate:

(a) $7 \cdot 3 + 4 \cdot 9 \square 6 \cdot 82$

(b) $8 \cdot 6 + 5 \cdot 7 \square 6 \cdot 45$

(c) $26 \cdot 2 \square 11 \cdot 5 \square 7 \cdot 9$

(d) $13 \cdot 3 \square 2 \cdot 9 + 4 \cdot 5$

(e) $13 \cdot 5 \square 6 \cdot 2 + 1 \cdot 76$

(f) $14 \cdot 37 \square 8 \cdot 7 + 3 \cdot 58$

(g) $4 \cdot 7 + 0 \cdot 36 \square 7$

(h) $5 \cdot 15 + 2 \cdot 91 \square 3$

(i) $17 \cdot 7 + 2 \cdot 72 \square 6$

(j) $64 \cdot 3 \square 12 \cdot 9 \square 4$

(k) $23 \cdot 7 \square 3 \cdot 42 \square 6$

(l) $(12 \cdot 8 \square 7 \cdot 35) \square 9$

(m) $8 \cdot 15 + 48 \cdot 3 \div 7$

(n) $19 \cdot 85 \square 12 \cdot 2 \div 5$

(o) $(9 \cdot 84 + 19 \cdot 2) \div 3$

(p) $43 \cdot 2 \square 38 \cdot 7 \div 9$

(q) $34 \cdot 2 \square 29 \cdot 4 \div 6$

(r) $(17 \cdot 6 \square 11 \cdot 24) \div 4$

2. Evaluate:

(a) $3\frac{1}{4} + 2\frac{1}{3}$

(b) $5\frac{2}{5} + 3\frac{1}{2}$

(c) $6\frac{3}{4} + 2\frac{5}{6}$

(d) $4\frac{2}{3} + 1\frac{1}{8}$

(e) $3\frac{2}{9} + 4\frac{5}{12}$

(f) $9\frac{3}{4} \square 5\frac{1}{3}$

(g) $6\frac{2}{3} \square 2\frac{3}{8}$

(h) $7\frac{5}{6} \square 4\frac{3}{5}$

(i) $10\frac{5}{6} \square 8\frac{2}{9}$

(j) $12\frac{5}{8} \square 9\frac{3}{4}$

(k) $\frac{1}{3} + \frac{3}{4} \square \frac{5}{6}$

(l) $\frac{5}{8} + \frac{1}{3} \square \frac{3}{4}$

(m) $3\frac{1}{2} + 2\frac{3}{4} \square 1\frac{2}{3}$

(n) $2\frac{3}{4} \square \frac{2}{3} + 4\frac{1}{2}$

(o) $\frac{5}{9} \square \frac{2}{3} + \frac{5}{6}$

3. Evaluate:

(a) $\frac{2}{3} \square \frac{7}{8}$

(b) $\frac{3}{4}$ of $\frac{5}{6}$

(c) $\frac{5}{8} \square \frac{4}{9}$

(d) $\frac{3}{5}$ of $\frac{7}{12}$

(e) $\frac{8}{9} \square \frac{3}{4}$

(f) $\frac{4}{9} \div \frac{3}{5}$

(g) $\frac{1}{3} \div \frac{4}{9}$

(h) $\frac{1}{8} \div \frac{3}{4}$

(i) $\frac{5}{12} \div \frac{2}{3}$

(j) $\frac{4}{9} \div \frac{5}{6}$

(k) $1\frac{1}{3} \square \frac{7}{10}$

(l) $1\frac{2}{3} \square \frac{4}{5}$

(m) $5\frac{1}{3} \square 4\frac{1}{2}$

(n) $1\frac{2}{3} \square 2\frac{1}{4}$

(o) $3\frac{3}{4} \square 1\frac{1}{5}$

(p) $1\frac{1}{2} \div \frac{9}{10}$

(q) $\frac{2}{9} \div 1\frac{2}{3}$

(r) $1\frac{3}{5} \div 2\frac{2}{3}$

(s) $2\frac{2}{9} \div 3\frac{1}{3}$

(t) $3\frac{3}{5} \div 4\frac{2}{3}$

4. Evaluate:

(a) $\frac{3}{10} + \frac{2}{5} \square \frac{2}{3}$

(b) $\frac{1}{8} + \frac{3}{4}$ of $\frac{5}{6}$

(c) $\frac{5}{6} \square \frac{2}{3} \square \frac{5}{8}$

(d) $\frac{4}{5} \square \frac{3}{5}$ of $\frac{2}{9}$

(e) $\frac{4}{15} + \frac{3}{4} \square \frac{8}{9}$

(f) $\frac{4}{5}$ of $\frac{7}{8} \square \frac{2}{3}$

(g) $\frac{3}{5} \square \frac{2}{9} + \frac{1}{6}$

(h) $\frac{3}{8}$ of $\frac{7}{10} \square \frac{8}{15}$

(i) $\frac{3}{4} \square \frac{3}{8} + \frac{1}{6}$

(j) $\frac{2}{3}$ of $\frac{3}{4} \square \frac{1}{6}$

(k) $\frac{2}{9} + \frac{1}{8} \div \frac{3}{4}$

(l) $\frac{9}{10} \square \frac{1}{3} + \frac{5}{9}$

(m) $\frac{5}{6} \square \frac{3}{4} + \frac{2}{3}$

(n) $\frac{2}{3} + \frac{1}{6} \div \frac{3}{8}$

(o) $\frac{1}{3} + \frac{4}{5} \square \frac{1}{3}$

(p) $\frac{3}{10} + \frac{1}{5} \square 2\frac{2}{3}$

(q) $4\frac{1}{2} \square 1\frac{2}{3} \square \frac{3}{4}$

(r) $7\frac{1}{4} + \frac{2}{3}$ of $4\frac{4}{5}$

(s) $5\frac{2}{3} \square \frac{3}{8}$ of $6\frac{2}{5}$

(t) $8\frac{3}{4} \square 4\frac{2}{3} \div \frac{7}{8}$

ANSWERS

1. (a) $5 \cdot 38$ (b) $7 \cdot 85$ (c) $6 \cdot 8$ (d) $14 \cdot 9$ (e) $9 \cdot 06$ (f) $9 \cdot 25$ (g) $7 \cdot 22$
(h) $13 \cdot 88$ (i) $34 \cdot 02$ (j) $12 \cdot 7$ (k) $3 \cdot 18$ (l) $49 \cdot 05$ (m) $15 \cdot 05$ (n) $17 \cdot 41$
(o) $9 \cdot 68$ (p) $38 \cdot 9$ (q) $29 \cdot 3$ (r) $1 \cdot 59$

2. (a) $5\frac{7}{12}$ (b) $8\frac{9}{10}$ (c) $9\frac{7}{12}$ (d) $5\frac{19}{24}$ (e) $7\frac{23}{36}$ (f) $4\frac{5}{12}$ (g) $4\frac{7}{24}$ (h) $3\frac{7}{30}$
(i) $2\frac{11}{18}$ (j) $2\frac{7}{8}$ (k) $\frac{1}{4}$ (l) $\frac{5}{24}$ (m) $4\frac{7}{12}$ (n) $6\frac{7}{12}$ (o) $\frac{13}{18}$

3. (a) $\frac{7}{12}$ (b) $\frac{5}{8}$ (c) $\frac{5}{18}$ (d) $\frac{7}{20}$ (e) $\frac{2}{3}$ (f) $\frac{20}{27}$ (g) $\frac{3}{4}$ (h) $\frac{1}{6}$
(i) $\frac{5}{8}$ (j) $\frac{8}{15}$ (k) $\frac{14}{15}$ (l) $1\frac{1}{3}$ (m) 24 (n) $3\frac{3}{4}$ (o) $4\frac{1}{2}$ (p) $1\frac{2}{3}$
(q) $\frac{2}{15}$ (r) $\frac{3}{5}$ (s) $\frac{2}{3}$ (t) $\frac{27}{35}$

4. (a) $\frac{17}{30}$ (b) $\frac{3}{4}$ (c) $\frac{5}{12}$ (d) $\frac{2}{3}$ (e) $\frac{14}{15}$ (f) $\frac{1}{6}$ (g) $\frac{7}{30}$ (h) $\frac{1}{16}$
(i) $\frac{13}{32}$ (j) $\frac{7}{18}$ (k) $\frac{7}{18}$ (l) $\frac{3}{10}$ (m) $\frac{1}{8}$ (n) $2\frac{2}{9}$ (o) $\frac{5}{7}$ (p) $\frac{5}{6}$
(q) $3\frac{1}{4}$ (r) $10\frac{9}{20}$ (s) $3\frac{4}{15}$ (t) $3\frac{5}{12}$