

**FRACTIONS – PRACTICE QUESTIONS  
NON-CALCULATOR**



metatutor

1.

Fully simplify each fraction:

(a)  $\frac{5}{10}$

(b)  $\frac{3}{9}$

(c)  $\frac{2}{8}$

(d)  $\frac{30}{70}$

(e)  $\frac{25}{30}$

(f)  $\frac{20}{32}$

(g)  $\frac{12}{36}$

(h)  $\frac{15}{27}$

(i)  $\frac{22}{55}$

(j)  $\frac{24}{60}$

(k)  $\frac{16}{100}$

(l)  $\frac{24}{120}$

(m)  $\frac{200}{2000}$

(n)  $\frac{900}{30000}$

2.

Work out:

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

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

$$(c) \frac{1}{9} + \frac{4}{9}$$

$$(d) \frac{3}{11} + \frac{5}{11}$$

$$(e) \frac{8}{9} - \frac{1}{9}$$

$$(f) \frac{7}{13} - \frac{4}{13}$$

$$(g) \frac{10}{21} - \frac{6}{21}$$

3.

Work out, fully simplifying your answers:

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

$$(b) \frac{2}{5} + \frac{1}{10}$$

$$(c) \frac{5}{12} + \frac{1}{4}$$

$$(d) \frac{7}{20} + \frac{2}{5}$$

$$(e) \frac{3}{4} - \frac{7}{16}$$

$$(f) \frac{13}{18} - \frac{1}{6}$$

$$(g) \frac{17}{24} - \frac{1}{4}$$

$$(h) \frac{2}{7} + \frac{20}{49}$$

4.

Work out:

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

$$(b) \frac{2}{5} + \frac{1}{6}$$

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

$$(d) \frac{4}{9} + \frac{2}{5}$$

$$(e) \frac{3}{10} + \frac{3}{7}$$

$$(f) \frac{5}{8} + \frac{3}{11}$$

$$(g) \frac{3}{4} + \frac{2}{9}$$

$$(h) \frac{4}{5} - \frac{1}{4}$$

$$(i) \frac{7}{8} - \frac{1}{3}$$

$$(j) \frac{5}{12} - \frac{1}{5}$$

$$(k) \frac{9}{11} - \frac{4}{7}$$

$$(l) \frac{8}{9} - \frac{3}{4}$$

5.

Work out, fully simplifying your answers:

(a)  $\frac{1}{4} \times \frac{1}{3}$

(b)  $\frac{3}{10} \times \frac{1}{5}$

(c)  $\frac{5}{7} \times \frac{2}{3}$

(d)  $\frac{3}{8} \times \frac{4}{5}$

(e)  $\frac{5}{6} \times \frac{2}{3}$

(f)  $\frac{3}{4} \times \frac{5}{12}$

(g)  $\frac{2}{9} \times \frac{6}{5}$

(h)  $\frac{7}{12} \times \frac{3}{5}$

6.

Work out, fully simplifying your answers:

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

(b)  $\frac{4}{11} \div \frac{1}{2}$

(c)  $\frac{5}{7} \div \frac{4}{3}$

(d)  $\frac{3}{8} \div \frac{4}{5}$

(e)  $\frac{2}{3} \div \frac{6}{7}$

(f)  $\frac{5}{9} \div \frac{5}{6}$

(g)  $\frac{2}{9} \div \frac{4}{3}$

(h)  $\frac{9}{20} \div \frac{3}{4}$

7.

Work out, fully simplifying your answers:

(a)  $\frac{2}{5} + \frac{2}{9}$

(b)  $\frac{3}{8} \times \frac{3}{2}$

(c)  $\frac{9}{10} - \frac{3}{4}$

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

(e)  $\frac{3}{11} \times \frac{8}{5}$

(f)  $\frac{10}{9} - \frac{1}{3}$

(g)  $\frac{8}{11} \div \frac{4}{3}$

(h)  $\frac{5}{12} + \frac{1}{2}$

(i)  $\frac{13}{9} - \frac{1}{2}$

(j)  $\frac{4}{7} \times \frac{3}{8}$

(k)  $\frac{11}{20} + \frac{2}{5}$

(l)  $\frac{14}{15} - \frac{1}{4}$

8.

(a) Find  $\frac{1}{4}$  of 48.

(b) Find  $\frac{1}{3}$  of 45.

(c) Find  $\frac{3}{5}$  of 55.

(d) Find  $\frac{5}{6}$  of 78.

(e) Find  $\frac{4}{9}$  of 108.

(f) Find  $\frac{5}{8}$  of 112.

(g) Find  $\frac{3}{7}$  of 371.

(h) Find  $\frac{5}{9}$  of 414.

9.

Work out, fully simplifying your answers:

(a)  $5 \times \frac{1}{6}$

(b)  $\frac{3}{11} \times 3$

(c)  $\frac{3}{10} \times 2$

(d)  $\frac{6}{35} \times 5$

(e)  $\frac{9}{80} \times 4$

(f)  $\frac{11}{100} \times 8$

10.

Work out, fully simplifying your answers:

(a)  $\frac{1}{4} \div 2$

(b)  $\frac{3}{5} \div 3$

(c)  $\frac{3}{8} \div 6$

(d)  $\frac{8}{9} \div 4$

(e)  $\frac{7}{12} \div 2$

(f)  $\frac{12}{13} \div 6$

11.

(a)  $\frac{3}{5}$  of a number is 45. What is the number?

(b)  $\frac{5}{8}$  of a number is 40. What is the number?

(c)  $\frac{4}{9}$  of a number is 72. What is the number?

(d)  $\frac{7}{10}$  of a number is 98. What is the number?

(e)  $\frac{8}{11}$  of a number is 64. What is the number?

(f)  $\frac{9}{20}$  of a number is 135. What is the number?

(g)  $\frac{7}{12}$  of a number is 105. What is the number?



12.

Work out, fully simplifying your answers:

(a)  $\frac{13}{9} - \frac{2}{3}$

(b)  $\frac{7}{10} \times \frac{4}{5}$

(c)  $\frac{3}{4} + \frac{2}{9}$

(d)  $\frac{6}{11} \div 3$

(e)  $\frac{7}{12} + \frac{1}{4}$

(f)  $\frac{9}{10} \div \frac{4}{3}$

(g)  $\frac{3}{7} \times 14$

(h)  $\frac{7}{9} - \frac{3}{5}$

(i)  $\frac{3}{5} \times \frac{4}{10}$

(j)  $\frac{11}{24} + \frac{3}{8}$

(k)  $\frac{9}{16} \div \frac{3}{2}$

(l)  $1 - \frac{2}{9}$

13.

Work out, fully simplifying your answers:

(a)  $\frac{2}{9} + \frac{4}{9}$

(b)  $\frac{5}{12} \times \frac{3}{8}$

(c)  $\frac{16}{15} \div 4$

(d)  $\frac{4}{11} + \frac{1}{4}$

(e)  $\frac{9}{10} - \frac{5}{8}$

(f)  $20 \times \frac{1}{50}$

(g)  $\frac{5}{7} + \frac{2}{11}$

(h)  $\frac{10}{13} \times \frac{3}{5}$

(i)  $\frac{3}{5} - \frac{7}{12}$

(j)  $\frac{7}{9} \div \frac{4}{3}$

(k)  $\frac{9}{19} \div \frac{3}{2}$

(l)  $\frac{1}{3} + \frac{1}{4} + \frac{2}{11}$