

Check Point 1

1. Find the value of each expression in lowest terms.

(a) $2\frac{1}{5} + 1\frac{3}{4}$

$$= \frac{11 \times 4}{5 \times 4} + \frac{7 \times 5}{4 \times 5}$$

$$= \frac{44 + 35}{20}$$

$$= \frac{79}{20}$$

$$= 3\frac{19}{20}$$

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

$$= \frac{3 \times 5}{2 \times 5} + \frac{13 \times 2}{5 \times 2}$$

$$= \frac{15 + 26}{10}$$

$$= \frac{41}{10}$$

$$= 4\frac{1}{10}$$

(c) $3\frac{1}{2} - 1\frac{1}{2}$

$$= \frac{7 \times 2}{2 \times 2} - \frac{3 \times 2}{2 \times 2}$$

$$= \frac{14 - 6}{4}$$

$$= \frac{8}{4}$$

$$= 2$$

(d) $3\frac{1}{2} - 2\frac{2}{3}$

$$= \frac{7 \times 3}{2 \times 3} - \frac{8 \times 2}{3 \times 2}$$

$$= \frac{21 - 16}{6}$$

$$= \frac{5}{6}$$

(e) $3\frac{1}{2} - 2\frac{5}{9}$

$$= \frac{7 \times 9}{2 \times 9} - \frac{23 \times 2}{9 \times 2}$$

$$= \frac{63 - 46}{18}$$

$$= \frac{17}{18}$$

(f) $5\frac{1}{2} - 5\frac{1}{4}$

$$= \frac{11 \times 4}{2 \times 4} - \frac{21 \times 2}{4 \times 2}$$

$$= \frac{44 + 42}{8}$$

$$= \frac{86}{8}$$

$$= 10\frac{3}{4}$$

wrong LCM
Please try!

(g) $3\frac{1}{2} - 3\frac{1}{2}$

$$= \frac{7 \times 2}{2 \times 2} - \frac{7 \times 2}{2 \times 2}$$

$$= \frac{14 - 14}{4}$$

$$= \frac{0}{4}$$

(h) $2\frac{3}{4} + 1\frac{1}{5}$

$$= \frac{11 \times 5}{4 \times 5} + \frac{6 \times 4}{5 \times 4}$$

$$= \frac{55 + 24}{20}$$

$$= \frac{79}{20}$$

$$= 3\frac{19}{20}$$

(i) $1\frac{10}{11} - 1\frac{1}{3}$

$$= \frac{21 \times 3}{11 \times 3} - \frac{4 \times 11}{3 \times 11}$$

$$= \frac{63 - 44}{33}$$

$$= \frac{19}{33}$$

(j) $5\frac{3}{4} - 5\frac{1}{4}$

$$= \frac{23 \times 4}{4 \times 4} - \frac{21 \times 4}{4 \times 4}$$

$$= \frac{92 - 84}{16}$$

$$= \frac{8}{16}$$

$$= \frac{1}{2}$$

(k) $3\frac{1}{4} - 2\frac{3}{8}$

$$= \frac{13 \times 8}{4 \times 8} - \frac{19 \times 4}{8 \times 4}$$

$$= \frac{104 - 76}{32}$$

$$= \frac{28}{32}$$

$$= \frac{7}{8}$$

(l) $1\frac{5}{12} + 3\frac{1}{3}$

$$= \frac{17 \times 3}{12 \times 3} + \frac{10 \times 12}{3 \times 12}$$

$$= \frac{51 + 120}{36}$$

$$= \frac{171}{36}$$

$L_{cm} = 3 \times 4 = 12$

2. Find the value of each expression in lowest term.

a) $\frac{1}{2} \times \frac{5}{4}$

$$= \frac{1 \times 5}{2 \times 4} = \frac{5}{8}$$

h) $\frac{1}{6} \div \frac{8}{11}$

$$= \frac{1}{6} \times \frac{11}{8} = \frac{11}{48}$$

b) $\frac{1}{4} \times \frac{5}{3}$

$$= \frac{1 \times 5}{4 \times 3} = \frac{5}{12}$$

i) $\frac{11}{9} \div \frac{1}{2}$

$$= \frac{11}{9} \times \frac{2}{1} = \frac{22}{9} = 2 \frac{4}{9}$$

c) $\frac{10}{3} \times \frac{11}{6}$

$$= \frac{10 \times 11}{3 \times 6} = \frac{110}{18} = 6 \frac{1}{9}$$

j) $\frac{1}{9} \div \frac{1}{2}$

$$= \frac{1}{9} \times \frac{2}{1} = \frac{2}{9}$$

d) $\frac{14}{9} \times \frac{7}{10}$

$$= \frac{14 \times 7}{9 \times 10} = \frac{98}{90} = \frac{49}{45}$$

k) $\frac{1}{3} \div \frac{13}{9}$

$$= \frac{1}{3} \times \frac{9}{13} = \frac{9}{39} = \frac{3}{13}$$

e) $\frac{1}{3} \times \frac{20}{9}$

$$= \frac{1 \times 20}{3 \times 9} = \frac{20}{27}$$

l) $\frac{13}{4} \div \frac{1}{2}$

$$= \frac{13}{4} \times \frac{2}{1} = \frac{26}{4} = 6 \frac{1}{2}$$

f) $\frac{15}{8} \times \frac{7}{6}$

$$= \frac{15 \times 7}{8 \times 6} = \frac{105}{48} = 2 \frac{7}{16}$$

m) $\frac{3}{2} \div \frac{4}{9}$

$$= \frac{3}{2} \times \frac{9}{4} = \frac{27}{8} = 3 \frac{3}{8}$$

g) $\frac{13}{7} \times \frac{14}{11}$

$$= \frac{13 \times 14}{7 \times 11} = \frac{182}{77} = 2 \frac{4}{11}$$

n) $\frac{17}{9} \div \frac{3}{5}$

$$= \frac{17}{9} \times \frac{5}{3} = \frac{85}{27} = 3 \frac{14}{27}$$