Exercise 20

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

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

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

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

1. (c) $\frac{1}{2} \div 4$

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

(d) $\frac{1}{3} \div 3$

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

(e) $\frac{1}{5} \div 4$

$= \frac{1}{5} \times \frac{1}{4} = \frac{1}{20}$

(f) $\frac{1}{6} \times 5 = \frac{1}{6} \times \frac{1}{5} = \frac{1}{30}$

2. (a) $\frac{2}{3}$ by 2

$= \frac{2}{3} \div 2 = \frac{\cancel{2}^{1}}{3} \times \frac{1}{\cancel{2}} = \frac{1}{3}$

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

$= \frac{3}{4} \div 3 = \frac{\cancel{3}^{1}}{4} \times \frac{1}{\cancel{3}} = \frac{1}{4}$

(c) $5\frac{1}{4} \div 42$

$= \frac{\cancel{21}}{4} \times \frac{1}{\cancel{42}_{2}} = \frac{1}{8}$

(d) $\frac{8}{5}$ by 4

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

(e) $\frac{12}{17}$ by 4

$= \frac{12}{17} \div 4 = \frac{\cancel{12}^{3}}{17} \times \frac{1}{\cancel{4}} = \frac{3}{17}$

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

$= \frac{4}{7} \div 4 = \frac{\cancel{4}^{1}}{7} \times \frac{1}{\cancel{4}} = \frac{1}{7}$

(f) $\frac{14}{25}$ by 7 $= \frac{14}{25} \div 7 = \frac{\cancel{14}^{2}}{25} \times \frac{1}{\cancel{7}} = \frac{2}{25}$

3. (a) $2\frac{1}{3} \div 7$

$= \frac{\cancel{7}^{1}}{3} \times \frac{1}{\cancel{7}} = \frac{1}{3}$

(b) $3\frac{1}{4} \div 26$

$= \frac{\cancel{13}}{4} \times \frac{1}{\cancel{26}_{2}} = \frac{1}{8}$

(c) $5\frac{1}{4} \div 42$

$= \frac{\cancel{21}}{4} \times \frac{1}{\cancel{42}_{2}} = \frac{1}{8}$

(d) $7\frac{2}{3} \div 46$

$= \frac{\cancel{23}}{3} \times \frac{1}{\cancel{46}_{2}} = \frac{1}{6}$

(e) $11\frac{2}{5} \div 57$

$= \frac{\cancel{57}^{1}}{5} \times \frac{1}{\cancel{57}} = \frac{1}{5}$

(f) $12\frac{3}{4} \div 102$

$= \frac{\cancel{51}}{4} \times \frac{1}{\cancel{102}_{2}} = \frac{1}{8}$

4. (a) $\frac{1}{3} \div 5 = \frac{1}{3} \times \frac{1}{5}$ T

(b) $\frac{3}{7} \div 8 = \frac{3}{7} \times \frac{1}{8}$ T

(c) $12\frac{1}{2} \div 7 = \frac{25}{2} \times 7$ F

($\downarrow \frac{1}{7}$)

(d) $8\frac{1}{5} \div 9 = \frac{41}{5} \times 9$ F

($\downarrow \frac{1}{9}$)