

(1)

Exercise 10 A

$$1) i) 8\% = \frac{8 \div 4}{100 \div 4} = \boxed{\frac{2}{25}}$$

$$ii) 74\% = \frac{74 \div 2}{100 \div 2} = \boxed{\frac{37}{50}}$$

$$iii) 350\% = \frac{350 \div 10}{100 \div 10} = \frac{35 \div 5}{10 \div 5} = \frac{7}{2}$$

$$= \boxed{3\frac{1}{2}}$$

$$iv) 12\frac{1}{2}\% = \frac{25\%}{2\%} = \frac{25}{2} \div \frac{100}{1}$$

$$= \frac{25}{2} \times \frac{1}{100} = \boxed{\frac{1}{8}}$$

$$v) 36\frac{2}{3}\% = \frac{110\%}{3\%}$$

$$\begin{array}{r} 36 \\ \times 3 \\ \hline 108 \end{array}$$

$$= \frac{110}{3} \times \frac{1}{100} = \boxed{\frac{11}{30}}$$

$$vi) \frac{3}{4}\% = \frac{3}{4} \times \frac{1}{100} = \boxed{\frac{3}{400}}$$

$$vii) 9.6\% = \frac{96\%}{10\%} = \frac{96}{10} \times \frac{1}{100} = \boxed{\frac{12}{125}}$$

(2)

$$9.6\% \stackrel{\text{OR}}{=} \frac{9.6}{100} \times 10 = \frac{96}{1000} \div 4$$

$$= \frac{24}{250} \div 2 = \boxed{\frac{12}{125}}$$

$$\text{viii) } 0.25\% = \frac{25}{100}\% = \frac{25}{100} \times \frac{1}{100}$$

$$= \boxed{\frac{1}{400}}$$

$$2. \text{ i) } 63\% = \frac{63}{100} = \boxed{0.63}$$

$$\text{ii) } 8\frac{1}{2}\% = \frac{17}{2}\% = \frac{17}{2} \times \frac{1}{100}$$

$$= \frac{17}{200} = \boxed{0.085}$$

$$\begin{array}{r} 085 \\ 200 \overline{) 1700} \\ \underline{-1600} \\ 1000 \\ \underline{-1000} \\ 0 \end{array}$$

$$\begin{array}{r} \text{OR} \\ 17 \times 5 = 85 \\ 200 \times 5 = 1000 \end{array} \quad \boxed{0.085} \quad \begin{array}{r} 1000 \\ \underline{1000} \\ - \end{array}$$

$$\text{iii) } 136\% = \frac{136}{100} = \boxed{1.36}$$

$$\text{iv) } \frac{4}{5}\% = \frac{4}{5} \times \frac{1}{100} = \frac{1}{125}$$

(3)

$$= \boxed{0.008}$$

$$\begin{array}{r} .008 \\ 125 \overline{) 1000} \\ \underline{-1000} \\ - \end{array}$$

$$\frac{4}{5}\% = \frac{\text{OR}}{5} \times \frac{1}{100} \rightarrow$$

$$= \frac{4}{500} \times 2 = \frac{8}{1000} = \boxed{0.008}$$

$$\text{v) } 7.5\% = \frac{7.5 \times 10}{100 \times 10} = \frac{75}{1000} = \boxed{0.075}$$

$$\text{vi) } 12.8\% = \frac{12.8 \times 10}{100 \times 10} = \frac{128}{1000} = \boxed{0.128}$$

$$\text{3.i) } 32\% = \frac{32 \div 4}{100 \div 4} = \frac{8}{25} = \boxed{8\%25}$$

$$\text{ii) } 16\frac{2}{3}\% = \frac{50}{3}\% = \frac{50}{3} \times \frac{1}{100} = \frac{1}{6}$$
$$= \boxed{1:6}$$

$$\text{iii) } 75.6\% = \frac{75.6 \times 10}{100 \times 10} = \frac{756 \div 4}{1000 \div 4}$$

$$= \frac{189}{250} = \boxed{189\%250}$$

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$$\text{iv) } 120\% = \frac{120}{100} \div 2 = \frac{6}{5} = \boxed{6:5}$$

4a) 35%

$$\text{i) } \frac{35}{100} \div 5 = \boxed{\frac{7}{25}}$$

$$\text{ii) } \frac{35}{100} = \boxed{0.35}$$

$$\text{iii) } \frac{35}{100} \div 5 = \frac{7}{25} = \boxed{7:25}$$

b) 125%

$$\text{i) } \frac{125}{100} \div 25 = \frac{5}{4} = \boxed{1\frac{1}{4}}$$

$$\text{ii) } \frac{125}{100} = \boxed{1.25}$$

$$\text{iii) } \frac{125}{100} \div 25 = \frac{5}{4} = \boxed{5:4}$$

$$\text{5 i) } \frac{17}{20} \times \frac{5}{100}\% = \boxed{85\%}$$

$$\text{ii) } \frac{9}{16} \times \frac{25}{100}\% = \frac{225}{4}\%$$

$$= \boxed{56\frac{1}{4}\%}$$

$$\begin{array}{r} 056 \\ 4 \overline{) 225} \\ \underline{-20} \\ 25 \\ \underline{-24} \\ 1 \end{array}$$

(5)

iii) $\frac{5}{12} \times 100\% = \frac{125}{3}\% = \boxed{41\frac{2}{3}\%}$

iv) $\frac{3}{8} \times 100\% = \frac{75}{2}\% = \boxed{37\frac{1}{2}\%}$

v) $\frac{1}{12} \times 100\% = \frac{25}{3}\% = \boxed{8\frac{1}{3}\%}$

vi) $\frac{1}{200} \times 100\% = \frac{1}{2}\%$ or $\boxed{0.5\%}$

vii) $2\frac{3}{4} = \frac{11}{4} \times 100\% = \boxed{275\%}$

viii) $1\frac{7}{8} = \frac{15}{8} \times 100\% = \frac{375}{2}\% = \boxed{187\frac{1}{2}\%}$

6

i) $0.7 \times 100\% = 70.0\% = \boxed{70\%}$

ii) $0.54 \times 100\% = \frac{54}{100} \times 100\% = \boxed{54\%}$

iii) $0.06 = \frac{6}{100} \times 100\% = \boxed{6\%}$

iv) $0.083 = \frac{83}{1000} \times 100\% = \frac{83}{10}\% = \boxed{8.3\%}$

(6)

~~Vii)~~

$$v) 1.05 = \frac{105}{100} \times 100\% = \boxed{105\%}$$

$$vi) 4.5 = \frac{45}{10} \times 100\% = \boxed{450\%}$$