

#### Exercise 10A

# Q1

### Answer:

We have the following:

(i) 
$$\frac{47}{100} = \left(\frac{47}{100} \times 100\right)\% = 47\%$$

(ii) 
$$\frac{9}{20} = \left(\frac{9}{20} \times 100\right)\% = (9 \times 5)\% = 45\%$$

(iii) 
$$\frac{3}{8} = \left(\frac{3}{8} \times 100\right)\% = \left(\frac{3 \times 25}{2}\right)\% = \left(\frac{75}{2}\right)\% = 37\frac{1}{2}\%$$

(iv) 
$$\frac{8}{125} = \left(\frac{8}{125} \times 100\right)\% = \left(\frac{8 \times 4}{5}\right)\% = \left(\frac{32}{5}\right)\% = 6.4\%$$

(v) 
$$\frac{19}{500} = \left(\frac{19}{500} \times 100\right)\% = \left(\frac{19}{5}\right)\% = 3.8\%$$

(VĪ) 
$$\frac{4}{15} = \left(\frac{4}{15} \times 100\right)\% = \left(\frac{4 \times 20}{3}\right)\% = \left(\frac{80}{3}\right)\% = 26\frac{2}{3}\%$$

(Vii) 
$$\frac{2}{3} = \left(\frac{2}{3} \times 100\right)\% = \left(\frac{200}{3}\right)\% = 66\frac{2}{3}\%$$

(viii) 
$$1\frac{3}{5} = \frac{8}{5} = \left(\frac{8}{5} \times 100\right)\% = \left(8 \times 20\right)\% = 160\%$$

### Answer:

We have the following:

(i) 
$$32\% = \left(\frac{32}{100}\right) = \frac{8}{25}$$

(ii) 
$$6\frac{1}{4}\% = \left(\frac{25}{4}\right)\% = \left(\frac{25}{4} \times \frac{1}{100}\right) = \frac{1}{16}$$

(iii) 
$$26\frac{2}{3}\% = \left(\frac{80}{3}\right)\% = \left(\frac{80}{3} \times \frac{1}{100}\right) = \left(\frac{4 \times 1}{3 \times 5}\right) = \frac{4}{15}$$

(iv) 
$$120\% = \left(\frac{120}{100}\right) = \frac{6}{5} = 1\frac{1}{5}$$

(v) 
$$6.25\% = \left(\frac{6.25}{100}\right) = \left(\frac{625}{100 \times 100}\right) = \left(\frac{25}{400}\right) = \frac{1}{16}$$

(VI) 
$$0.8\% = \left(\frac{0.8}{100}\right) = \left(\frac{8}{10 \times 100}\right) = \left(\frac{8}{1000}\right) = \frac{1}{125}$$

(vii) 
$$0.06\% = \left(\frac{0.06}{100}\right) = \left(\frac{6}{100 \times 100}\right) = \left(\frac{6}{10000}\right) = \frac{3}{5000}$$

(viii) 
$$22.75\% = \left(\frac{22.75}{100}\right) = \left(\frac{2275}{100 \times 100}\right) = \frac{91}{400}$$

Q3

#### Answer:

We have:

(i) 
$$43\% = \frac{43}{100} = 43$$
: 100

(ii) 
$$36\% = \frac{36}{100} = \frac{9}{25} = 9$$
 : 25

(iii) 
$$7.5\% = \left(\frac{7.5}{100}\right) = \left(\frac{75}{10 \times 100}\right) = \frac{3}{40} = 3 : 40$$

(iv) 
$$125\% = \frac{125}{100} = \frac{5}{4} = 5$$
 : 4

### Q4

### Answer:

We have the following:

(i) 37 : 
$$100 = \frac{37}{100} = \left(\frac{37}{100} \times 100\right)\% = 37\%$$

(ii) 16: 25 = 
$$\frac{16}{25}$$
 =  $\left(\frac{16}{25} \times 100\right)\%$  =  $(16 \times 4)\%$  =  $64\%$ 

(iii) 3 : 5 = 
$$\frac{3}{5}$$
 =  $\left(\frac{3}{5} \times 100\right)\%$  =  $(3 \times 20)\%$  =  $60\%$ 

(iv) 5: 
$$4 = \frac{5}{4} = \left(\frac{5}{4} \times 100\right)\% = (5 \times 25)\% = 125\%$$

# Q5

#### Answer:

We have the following:

(i) 
$$45\% = \left(\frac{45}{100}\right) = 0.45$$

(ii) 127% = 
$$\left(\frac{127}{100}\right) = 1.27$$

(iii) 3.6% = 
$$\left(\frac{3.6}{100}\right) = \left(\frac{36}{10 \times 100}\right) = \frac{36}{1000} = 0.036$$

(iv) 0.23% = 
$$\left(\frac{0.23}{100}\right) = \left(\frac{23}{100 \times 100}\right) = \frac{23}{10000} = 0.0023$$

Q6

## Answer:

We have:

(i) 
$$0.6 = (0.6 \times 100)\% = 60\%$$

(ii) 
$$0.42 = (0.42 \times 100)\% = 42\%$$

(iii) 
$$0.07 = (0.07 \times 100)\% = 7\%$$

(iv) 
$$0.005 = (0.005 \times 100)\% = 0.5\%$$

\*\*\*\*\*\*\*\*\* END \*\*\*\*\*\*\*