

## EXERCISE 4A

### Convert the following into fractions in their lowest terms:

(i) 3.75

(ii) 0.5

(iii) 2.04

(iv) 0.65

(v) 2.405

(vi) 0.085

(vii) 8.025

**Solution:**

(i) 3.75

We can write it as

$$= 375/100$$

Here the HCF of 375 and 100 is 25

$$= (375 \div 25)/(100 \div 25)$$

So we get

$$= 15/4$$

(ii) 0.5

We can write it as

$$= 5/10$$

$$= 1/2$$

(iii) 2.04

We can write it as

$$= 204/100$$

Here the HCF of 204 and 100 is 4

$$= (204 \div 4)/(100 \div 4)$$

So we get

$$= 51/25$$

(iv) 0.65

We can write it as

$$= 65/100$$

Here the HCF of 65 and 100 is 5

$$= (65 \div 5)/(100 \div 5)$$

So we get

$$= 13/20$$

(v) 2.405

We can write it as

$$= 2405/1000$$

Here the HCF of 2405 and 1000 is 5

$$= (2405 \div 5)/(1000 \div 5)$$

So we get

$$= 481/200$$

(vi) 0.085

We can write it as

$$= 85/1000$$

Here the HCF of 85 and 1000 is 5

$$= (85 \div 5) / (1000 \div 5)$$

So we get

$$= 17/200$$

(vii) 8.025

We can write it as

$$= 8025/1000$$

Here the HCF of 8025 and 1000 is 25

$$= (8025 \div 25) / (1000 \div 25)$$

So we get

$$= 321/40$$

## 2. Convert into decimal fractions:

(i)  $2 \frac{4}{5}$

(ii)  $79/100$

(iii)  $37/10,000$

(iv)  $7543/10^4$

(v)  $3/4$

(vi)  $9 \frac{3}{5}$

(vii)  $8 \frac{5}{8}$

(viii)  $5 \frac{7}{8}$

**Solution:**

(i)  $2 \frac{4}{5}$

We can write it as

$$= 14/5 \times 2/2$$

So we get

$$= 28/10$$

$$= 2.8$$

(ii)  $79/100$

We can write it as

$$= 79/100$$

$$= 0.79$$

(iii)  $37/10,000$

We can write it as

$$= 37/10,000$$

$$= 0.0037$$

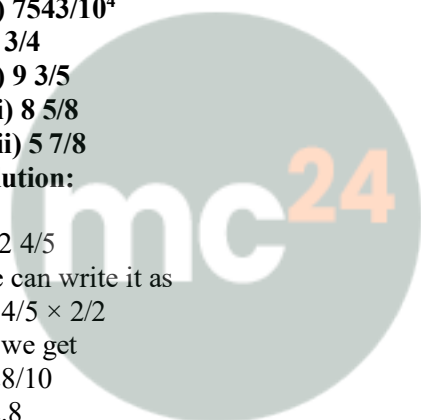
(iv)  $7543/10^4$

We can write it as

$$= 7543/10000$$

$$= 0.7543$$

(v)  $3/4$



$$\begin{array}{r} 0.75 \\ 4 \overline{) 3} \\ \underline{28} \\ 20 \\ \underline{20} \\ 0 \end{array}$$

By division we get  
= 0.75

(vi)  $9 \frac{3}{5}$   
we can write it as  
=  $\frac{48}{5}$   
By division

$$\begin{array}{r} 9.6 \\ 5 \overline{) 48} \\ \underline{45} \\ 30 \\ \underline{30} \\ 0 \end{array}$$

So we get  
= 9.6

(vii)  $8 \frac{5}{8}$

$$\begin{array}{r} 0.625 \\ 8 \overline{) 5} \\ \underline{48} \\ 20 \\ \underline{16} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

By division we get  
= 8.625

(viii)  $5 \frac{7}{8}$



$$\begin{array}{r} 0.875 \\ 8 \overline{) 7} \\ \underline{64} \\ 60 \\ \underline{56} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

By division we get  
= 5.875

**3. Write the number of decimal places in:**

- (i) 0.4762
- (ii) 7.00349
- (iii) 8235.403
- (iv) 35.4
- (v) 2.608
- (vi) 0.000879

**Solution:**

(i) 0.4762

There are four decimal places.

(ii) 7.00349

There are five decimal places.

(iii) 8235.403

There are three decimal places.

(iv) 35.4

There is one decimal place.

(v) 2.608

There are three decimal places.

(vi) 0.000879

There are six decimal places.

**4. Write the following decimals as word statements:**

- (i) 0.4, 0.9, 0.1
- (ii) 1.9, 4.4, 7.5
- (iii) 0.02, 0.56, 13.06
- (iv) 0.005, 0.207, 111.519
- (v) 0.8, 0.08, 0.008, 0.0008
- (vi) 256.1, 10.22, 0.634

**Solution:**



(i)  $0.4 =$  zero-point-four  
 $0.9 =$  zero-point-nine  
 $0.1 =$  zero-point-one

(ii)  $1.9 =$  one-point-nine  
 $4.4 =$  four-point-four  
 $7.5 =$  seven-point-five

(iii)  $0.02 =$  zero-point-zero-two  
 $0.56 =$  zero-point-five-six  
 $13.06 =$  thirteen-point-zero-six

(iv)  $0.005 =$  zero-point-zero-zero-five  
 $0.207 =$  zero-point-two-zero-seven  
 $111.519 =$  one hundred eleven-point-five-one-nine

(v)  $0.8 =$  zero-point-eight  
 $0.08 =$  zero-point-zero-eight  
 $0.008 =$  zero-point-zero-zero-eight  
 $0.0008 =$  zero-point-zero-zero-zero-eight

(vi)  $256.1 =$  two hundred fifty six-point-one  
 $10.22 =$  ten-point-two-two  
 $0.634 =$  zero-point-six-three-four

**5. Convert the given fractions into like fractions:**

**(i) 0.5, 3.62, 43.981 and 232.0037**

**(ii) 215.78, 33.0006, 530.3 and 0.03569**

**Solution:**

(i) 0.5, 3.62, 43.981 and 232.0037

The greatest decimal places is 4

So we get

$$0.5 = 0.5000$$

$$3.62 = 3.6200$$

$$43.981 = 43.9810$$

$$232.0037 = 232.0037$$

(ii) 215.78, 33.0006, 530.3 and 0.03569

The greatest decimal places is 5

$$215.78 = 215.78000$$

$$33.0006 = 33.00060$$

$$530.3 = 530.30000$$

$$0.03569 = 0.03569$$