

EXERCISE 7.6

PAGE: 7.24

1. Express as Rupees (Rs) using decimals:**(i) 15 paisa****(ii) 5 paisa****(iii) 350 paisa****(iv) 2 rupees 60 paisa****Solution:**

(i) 15 paisa

We know that 100 paisa = Rs 1

So we get 1 paisa = Rs $\frac{1}{100}$

It can be written as

 $15 \text{ paisa} = \frac{15}{100}$

We get

 $15 \text{ paisa} = \text{Rs } 0.15$

(ii) 5 paisa

We know that 100 paisa = Rs 1

So we get 1 paisa = Rs $\frac{1}{100}$

It can be written as

 $5 \text{ paisa} = \frac{5}{100}$

We get

 $5 \text{ paisa} = \text{Rs } 0.05$

(iii) 350 paisa

We know that 100 paisa = Rs 1

So we get 1 paisa = Rs $\frac{1}{100}$

It can be written as

 $350 \text{ paisa} = \frac{350}{100}$

We get

 $350 \text{ paisa} = \text{Rs } 3.50$

(iv) 2 rupees 60 paisa

We know that 100 paisa = Rs 1

So we get 1 paisa = Rs $\frac{1}{100}$

It can be written as

 $2 \text{ rupees } 60 \text{ paisa} = 2 + \frac{60}{100}$

We get

 $2 \text{ rupees } 60 \text{ paisa} = \text{Rs } 2.60$ **2. Express as metres (m) using decimals:****(i) 15 cm****(ii) 8 cm****(iii) 135 cm****(iv) 3 m 65 cm****Solution:**

(i) 15 cm

We know that 100 cm = 1 m

So we get $1 \text{ cm} = 1/100 \text{ m}$

It can be written as

$$15 \text{ cm} = 15 (1/100)$$

We get

$$15 \text{ cm} = 0.15 \text{ m}$$

(ii) 8 cm

We know that $100 \text{ cm} = 1 \text{ m}$

So we get $1 \text{ cm} = 1/100 \text{ m}$

It can be written as

$$8 \text{ cm} = 8 (1/100)$$

We get

$$8 \text{ cm} = 0.08 \text{ m}$$

(iii) 135 cm

We know that $100 \text{ cm} = 1 \text{ m}$

So we get $1 \text{ cm} = 1/100 \text{ m}$

It can be written as

$$135 \text{ cm} = 135 (1/100)$$

We get

$$135 \text{ cm} = 1.35 \text{ m}$$

(iv) 3 m 65 cm

We know that $100 \text{ cm} = 1 \text{ m}$

So we get $1 \text{ cm} = 1/100 \text{ m}$

It can be written as

$$3 \text{ m } 65 \text{ cm} = 3 + 65 (1/100)$$

We get

$$3 \text{ m } 65 \text{ cm} = 3.65 \text{ m}$$

3. Express as centimeter (cm) using decimals:

(i) 5 mm

(ii) 60 mm

(iii) 175 mm

(iv) 4 cm 5 mm

Solution:

(i) 5 mm

We know that $10 \text{ mm} = 1 \text{ cm}$

So we get $1 \text{ mm} = 1/10 \text{ cm}$

It can be written as

$$5 \text{ mm} = 5/10$$

We get

$$5 \text{ mm} = 0.5 \text{ cm}$$

(ii) 60 mm

We know that $10 \text{ mm} = 1 \text{ cm}$

So we get $1 \text{ mm} = 1/10 \text{ cm}$

It can be written as

$$60 \text{ mm} = 60/10$$

We get
 $60 \text{ mm} = 6 \text{ cm}$

(iii) 175 mm
We know that $10 \text{ mm} = 1 \text{ cm}$
So we get $1 \text{ mm} = 1/10 \text{ cm}$
It can be written as
 $175 \text{ mm} = 175/10$
We get
 $175 \text{ mm} = 17.5 \text{ cm}$

(iv) 4 cm 5 mm
We know that $10 \text{ mm} = 1 \text{ cm}$
So we get $1 \text{ mm} = 1/10 \text{ cm}$
It can be written as
 $4 \text{ cm } 5 \text{ mm} = 4 + 5/10$
We get
 $4 \text{ cm } 5 \text{ mm} = 4.5 \text{ cm}$

4. Express as kilometer (km) using decimals:

- (i) 5 m
- (ii) 55 m
- (iii) 555 m
- (iv) 5555 m
- (v) 15 km 35 m

Solution:

(i) 5 m
We know that $1000 \text{ m} = 1 \text{ km}$
So we get $1 \text{ m} = 1/1000 \text{ km}$
It can be written as
 $5 \text{ m} = 5/1000 \text{ km}$
We get
 $5 \text{ m} = 0.005 \text{ km}$

(ii) 55 m
We know that $1000 \text{ m} = 1 \text{ km}$
So we get $1 \text{ m} = 1/1000 \text{ km}$
It can be written as
 $55 \text{ m} = 55/1000 \text{ km}$
We get
 $55 \text{ m} = 0.055 \text{ km}$

(iii) 555 m
We know that $1000 \text{ m} = 1 \text{ km}$
So we get $1 \text{ m} = 1/1000 \text{ km}$
It can be written as
 $555 \text{ m} = 555/1000 \text{ km}$
We get
 $555 \text{ m} = 0.555 \text{ km}$

(iv) 5555 m

We know that $1000 \text{ m} = 1 \text{ km}$

So we get $1 \text{ m} = 1/1000 \text{ km}$

It can be written as

$$5555 \text{ m} = 5555/1000 \text{ km}$$

We get

$$5555 \text{ m} = 5.555 \text{ km}$$

(v) 15 km 35 m

We know that $1000 \text{ m} = 1 \text{ km}$

So we get $1 \text{ m} = 1/1000 \text{ km}$

It can be written as

$$15 \text{ km } 35 \text{ m} = 15 + 35/1000 \text{ km}$$

We get

$$15 \text{ km } 35 \text{ m} = 15.035 \text{ km}$$

5. Express as kilogram (kg) using decimals:

(i) 8 g

(ii) 150 g

(iii) 2750 g

(iv) 5 kg 750 g

(v) 36 kg 50 g

Solution:

(i) 8 g

We know that $1000 \text{ g} = 1 \text{ kg}$

So we get $1 \text{ g} = 1/1000 \text{ kg}$

It can be written as

$$8 \text{ g} = 8/1000$$

We get

$$8 \text{ g} = 0.008 \text{ kg}$$

(ii) 150 g

We know that $1000 \text{ g} = 1 \text{ kg}$

So we get $1 \text{ g} = 1/1000 \text{ kg}$

It can be written as

$$150 \text{ g} = 150/1000$$

We get

$$150 \text{ g} = 0.150 \text{ kg}$$

(iii) 2750 g

We know that $1000 \text{ g} = 1 \text{ kg}$

So we get $1 \text{ g} = 1/1000 \text{ kg}$

It can be written as

$$2750 \text{ g} = 2750/1000$$

We get

$$2750 \text{ g} = 2.750 \text{ kg}$$

(iv) 5 kg 750 g

We know that $1000 \text{ g} = 1 \text{ kg}$

So we get $1 \text{ g} = 1/1000 \text{ kg}$
It can be written as
 $5 \text{ kg } 750 \text{ g} = 5 + 750/1000$
We get
 $5 \text{ kg } 750 \text{ g} = 5.750 \text{ kg}$

(v) $36 \text{ kg } 50 \text{ g}$
We know that $1000 \text{ g} = 1 \text{ kg}$
So we get $1 \text{ g} = 1/1000 \text{ kg}$
It can be written as
 $36 \text{ kg } 50 \text{ g} = 36 + 50/1000$
We get
 $36 \text{ kg } 50 \text{ g} = 36.050 \text{ kg}$

6. Express each of the following without using decimals:

(i) **Rs 5.25**

(ii) **8.354 kg**

(iii) **3.5 cm**

(iv) **3.05 km**

(v) **7.54 m**

(vi) **15.005 kg**

(vii) **12.05 m**

(viii) **0.2 cm**

Solution:

(i) **Rs 5.25**

We know that $100 \text{ paisa} = 1 \text{ rupee}$

So we get $1 \text{ paisa} = 1/100 \text{ rupee}$

It can be written as

$$\text{Rs } 5.25 = 5 + 25/100$$

We get

$$\text{Rs } 5.25 = 5 + 1/4$$

On further calculation

$$\text{Rs } 5.25 = \text{Rs } 21/4$$

(ii) **8.354 kg**

We know that $1000 \text{ g} = 1 \text{ kg}$

So we get $1 \text{ g} = 1/1000 \text{ kg}$

It can be written as

$$8.354 \text{ kg} = 8354/1000 \text{ kg}$$

(iii) **3.5 cm**

We know that $10 \text{ mm} = 1 \text{ cm}$

So we get $1 \text{ mm} = 1/10 \text{ cm}$

It can be written as

$$3.5 \text{ cm} = 3 + 5/10$$

On further calculation

$$3.5 \text{ cm} = 3 + 1/2$$

We get

$$3.5 \text{ cm} = 7/2 \text{ cm}$$

(iv) 3.05 km

We know that $1000 \text{ m} = 1 \text{ km}$

So we get $1 \text{ m} = 1/1000 \text{ km}$

It can be written as

$$3.05 \text{ km} = 3 + 5/100$$

Multiplying and dividing by 10

$$3.05 \text{ km} = 3 + 50/1000$$

On further calculation

$$3.05 \text{ km} = 3 + 1/20$$

We get

$$3.05 \text{ km} = 61/20 \text{ km}$$

(v) 7.54 m

We know that $100 \text{ cm} = 1 \text{ m}$

So we get $1 \text{ cm} = 1/100 \text{ m}$

It can be written as

$$7.54 \text{ m} = 7 + 54/100$$

On further calculation

$$7.54 \text{ m} = 7 + 27/50$$

We get

$$7.54 \text{ m} = 377/50 \text{ m}$$

(vi) 15.005 kg

We know that $1 \text{ kg} = 1000 \text{ g}$

So we get $1 \text{ g} = 1/1000 \text{ kg}$

It can be written as

$$15.005 \text{ kg} = 15 + 5/1000$$

On further calculation

$$15.005 \text{ kg} = 15 + 1/200$$

We get

$$15.005 \text{ kg} = 3001/200 \text{ kg}$$

(vii) 12.05 m

We know that $1 \text{ m} = 100 \text{ cm}$

So we get $1 \text{ cm} = 1/100 \text{ m}$

It can be written as

$$12.05 \text{ m} = 12 + 5/100$$

On further calculation

$$12.05 \text{ m} = 12 + 1/20$$

We get

$$12.05 \text{ m} = 241/20 \text{ m}$$

(viii) 0.2 cm

We know that $10 \text{ mm} = 1 \text{ cm}$

So we get $1 \text{ mm} = 1/10 \text{ cm}$

It can be written as

$$0.2 \text{ cm} = 0 + 2/10$$

On further calculation

$$0.2 \text{ cm} = 1/5 \text{ cm}$$