Exercise 8.4

Question 1:

Express as rupees using decimals.

(a) 5 paise (b) 75 paise

(c) 20 paise (d) 50 rupees 90 paise

(e) 725 paise

Answer:

It is known that there are 100 paise in 1 rupee.

(a) $5 \text{ paise} = \dfrac{5}{100} \text{ rupees} = \text{Re } 0.05$

(b) $75 \text{ paise} = \dfrac{75}{100} \text{ rupees} = \text{Re } 0.75$

(c) $20 \text{ paise} = \dfrac{20}{100} \text{ rupees} = \text{Re } 0.20$

(d) $50 \text{ rupees } 90 \text{ paise} = \left(50 + \dfrac{90}{100}\right) \text{ rupees} = \text{Rs } 50.90$

(e) $725 \text{ paise} = \dfrac{725}{100} \text{ rupees} = \text{Rs } 7.25$

Question 2:

Express as metres using decimals.

(a) 15 cm (b) 6 cm

(c) 2 m 45 cm (d) 9 m 7 cm

(e) 419 cm

Answer:

It is known that there are 100 cm in 1 metre.

(a) $15 \text{ cm} = \dfrac{15}{100} \text{ m} = 0.15 \text{ m}$

(b) $6 \text{ cm} = \dfrac{6}{100} \text{ m} = 0.06 \text{ m}$

(c) $2 \text{ m } 45 \text{ cm} = \left(2 + \dfrac{45}{100}\right) \text{ m} = 2.45 \text{ m}$

(d) $9 \text{ m } 7 \text{ cm} = \left(9 + \dfrac{7}{100}\right) \text{ m} = 9.07 \text{ m}$

(e) $419 \text{ cm} = \dfrac{419}{100} \text{ m} = 4.19 \text{ m}$

Question 3:

Express as cm using decimals.

(a) 5 mm (b) 60 mm

(c) 164 mm (d) 9 cm 8 mm

(e) 93 mm

It is known that there are 10 mm in 1 cm.

(a) $5 \text{ mm} = \dfrac{5}{10} \text{ cm} = 0.5 \text{ cm}$

(b) $60 \text{ mm} = \dfrac{60}{10} \text{ cm} = 6.0 \text{ cm}$

(c) $164 \text{ mm} = \dfrac{164}{10} \text{ cm} = 16.4 \text{ cm}$

(d) $9 \text{ cm } 8 \text{ mm} = \left(9 + \dfrac{8}{10}\right) \text{ cm} = 9.8 \text{ cm}$

(e) $93 \text{ mm} = \dfrac{93}{10} \text{ cm} = 9.3 \text{ cm}$

Question 4:

Express as km using decimals.

(a) 8 m (b) 88 m

(c) 8888 m (d) 70 km 5 m

Answer:

It is known that there are 1000 metres in 1 km.

(a) $8 \text{ m} = \dfrac{8}{1000} \text{ km} = 0.008 \text{ km}$

(b) $88 \text{ m} = \dfrac{88}{1000} \text{ km} = 0.088 \text{ km}$

(c) $8888 \text{ m} = \dfrac{8888}{1000} \text{ km} = 8.888 \text{ km}$

(d) $70 \text{ km } 5 \text{ m} = \left(70 + \dfrac{5}{1000} \right) \text{ km} = 70.005 \text{ km}$

Question 5:

Express as kg using decimals.

(a) 2 g (b) 100 g

(c) 3750 g (d) 5 kg 8 g

(e) 26 kg 50 g

Answer:

It is known that there are 1000 grams in 1 kg.

(a) $2 \text{ g} = \dfrac{2}{1000} \text{ kg} = 0.002 \text{ kg}$

(b) $100 \text{ g} = \dfrac{100}{1000} \text{ kg} = 0.1 \text{ kg}$

(c) $3750 \text{ g} = \dfrac{3750}{1000} \text{ kg} = 3.750 \text{ kg}$

(d) $5 \text{ kg } 8 \text{ g} = \left(5 + \dfrac{8}{1000} \right) \text{ kg} = 5.008 \text{ kg}$

(e) $26 \text{ kg } 50 \text{ g} = \left(26 + \dfrac{50}{1000} \right) \text{ kg} = 26.050 \text{ kg}$

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