

Worksheet -1

Subject: - Mathematics

Class: - VII

Teacher: - Ms. Neeru

Name: _____ Class & Sec: _____ Roll No. _____ Date: 21.07.2020

Units of Length

kilometer	km	1,000 m
hectometer	hm	100 m
decameter	dam	10 m
meter	m	1 m
decimeter	dm	0.1 m
centimeter	cm	0.01 m
millimeter	mm	0.001 m

Metric (decimal system)

X  10

Ex2.5

Question 2

Express as rupees using decimals:

(i) 7 paise

(ii) 7 rupees 7 paise

(iii) 77 rupees 77 paise

(iv) 50 paise

(v) 235 paise

Answer 2:

$$\therefore 100 \text{ paise} = ₹1$$

$$\therefore 1 \text{ paise} = ₹ \frac{1}{100}$$

$$(i) 7 \text{ paise} = ₹ \frac{7}{100} = ₹ 0.07$$

$$(ii) 7 \text{ rupees 7 paise} = ₹ 7 + ₹ \frac{7}{100} = ₹ 7 + ₹ 0.07 = ₹ 7.07$$

$$(iii) 77 \text{ rupees 77 paise} = ₹ 77 + ₹ \frac{77}{100} = ₹ 77 + ₹ 0.77 = ₹ 77.77$$

$$(iv) 50 \text{ paise} = ₹ \frac{50}{100} = ₹ 0.50$$

$$(v) 235 \text{ paise} = ₹ \frac{235}{100} = ₹ 2.35$$

Question 3

- (i) Express 5 cm in metre and kilometre.
 (ii) Express 35 mm in cm, m and km.

Answer 3:

- (i) Express 5 cm in meter and kilometre.

$$\begin{aligned} \because 100 \text{ cm} &= 1 \text{ meter} \\ \therefore 1 \text{ cm} &= \frac{1}{100} \text{ meter} \\ \Rightarrow 5 \text{ cm} &= \frac{5}{100} = 0.05 \text{ meter.} \\ \text{Now,} \\ \because 1000 \text{ meters} &= 1 \text{ kilometers} \\ \therefore 1 \text{ meter} &= \frac{1}{1000} \text{ kilometer} \\ \Rightarrow 0.05 \text{ meter} &= \frac{0.05}{1000} = 0.00005 \text{ kilometer} \end{aligned}$$

- (ii) Express 35 mm in cm, m and km.

$$\begin{aligned} \because 10 \text{ mm} &= 1 \text{ cm} \\ \therefore 1 \text{ mm} &= \frac{1}{10} \text{ cm} \\ \Rightarrow 35 \text{ mm} &= \frac{35}{10} = 3.5 \text{ cm} \\ \text{Now, } \because 100 \text{ cm} &= 1 \text{ meter} \\ \therefore 1 \text{ cm} &= \frac{1}{100} \text{ meter} \\ \Rightarrow 3.5 \text{ cm} &= \frac{3.5}{100} = 0.035 \text{ meter} \\ \text{Again,} \\ \because 1000 \text{ meters} &= 1 \text{ kilometers} \\ \therefore 1 \text{ meter} &= \frac{1}{1000} \text{ kilometer} \\ \Rightarrow 0.035 \text{ meter} &= \frac{0.035}{1000} = 0.000035 \text{ kilometer} \end{aligned}$$

Question 4

Express in kg.:

- (i) 200 g (ii) 3470 g (iii) 4 kg 8 g

Answer 4:

Let us consider,

$$1000 \text{ g} = 1 \text{ kg}$$

$$\begin{aligned} \Rightarrow 1 \text{ g} &= \frac{1}{1000} \text{ kg} \\ \text{(i)} \quad 200 \text{ g} &= \left(200 \times \frac{1}{1000}\right) \text{ kg} = 0.2 \text{ kg} \\ \text{(ii)} \quad 3470 \text{ g} &= \left(3470 \times \frac{1}{1000}\right) \text{ kg} = 3.470 \text{ kg} \\ \text{(iii)} \quad 4 \text{ kg } 8 \text{ g} &= 4 \text{ kg} + \left(8 \times \frac{1}{1000}\right) \text{ kg} = 4 \text{ kg} + 0.008 \text{ kg} = 4.008 \text{ kg} \end{aligned}$$

Convert metric units of length

Grade 6 Measurements Worksheet

Convert the given measures to new units.

1. $50 \text{ m} = \underline{\hspace{2cm}} \text{ cm}$ 2. $20 \text{ m} = \underline{\hspace{2cm}} \text{ km}$

3. $43 \text{ km} = \underline{\hspace{2cm}} \text{ mm}$ 4. $29 \text{ km} = \underline{\hspace{2cm}} \text{ m}$

5. $36 \text{ km} = \underline{\hspace{2cm}} \text{ cm}$ 6. $14 \text{ cm} = \underline{\hspace{2cm}} \text{ km}$

7. $47 \text{ mm} = \underline{\hspace{2cm}} \text{ km}$ 8. $36 \text{ cm} = \underline{\hspace{2cm}} \text{ m}$

9. $24 \text{ mm} = \underline{\hspace{2cm}} \text{ m}$ 10. $46 \text{ mm} = \underline{\hspace{2cm}} \text{ m}$

11. $44 \text{ m} = \underline{\hspace{2cm}} \text{ km}$ 12. $46 \text{ m} = \underline{\hspace{2cm}} \text{ km}$

13. $33 \text{ cm} = \underline{\hspace{2cm}} \text{ km}$ 14. $24 \text{ cm} = \underline{\hspace{2cm}} \text{ km}$

15. $26 \text{ m} = \underline{\hspace{2cm}} \text{ cm}$ 16. $48 \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$

17. $42 \text{ km} = \underline{\hspace{2cm}} \text{ cm}$ 18. $15 \text{ mm} = \underline{\hspace{2cm}} \text{ km}$

Convert metric units of length

Grade 7 Measurements Worksheet

Convert the given measures to new units.

1. $50 \text{ m} = \underline{5,000} \text{ cm}$ 2. $20 \text{ m} = \underline{0.02} \text{ km}$

3. $43 \text{ km} = \underline{43,000,000} \text{ mm}$ 4. $29 \text{ km} = \underline{29,000} \text{ m}$

5. $36 \text{ km} = \underline{3,600,000} \text{ cm}$ 6. $14 \text{ cm} = \underline{0.00014} \text{ km}$

7. $47 \text{ mm} = \underline{0.000047} \text{ km}$ 8. $36 \text{ cm} = \underline{0.36} \text{ m}$

9. $24 \text{ mm} = \underline{0.024} \text{ m}$ 10. $46 \text{ mm} = \underline{0.046} \text{ m}$

11. $44 \text{ m} = \underline{0.044} \text{ km}$ 12. $46 \text{ m} = \underline{0.046} \text{ km}$

13. $33 \text{ cm} = \underline{0.00033} \text{ km}$ 14. $24 \text{ cm} = \underline{0.00024} \text{ km}$

15. $26 \text{ m} = \underline{2,600} \text{ cm}$ 16. $48 \text{ cm} = \underline{480} \text{ mm}$

17. $42 \text{ km} = \underline{4,200,000} \text{ cm}$ 18. $15 \text{ mm} = \underline{0.000015} \text{ km}$