

Chapter 9: Measurement

Warm-up

2. 27 mm 21 mm 2.6 cm 23 mm 2.3 cm
3. (a) Total weight = $6.74 \text{ g} + 7.74 \text{ g} + 8.54 \text{ g} = 23.02 \text{ g}$
(b) Difference = $4.07 \text{ g} - 3.09 \text{ g} = 0.98 \text{ g}$

Class Work (Page 144)

1. $8 \text{ km} = 8 \times 1000 \text{ m} = 8000 \text{ m}$
3. $4.5 \text{ m} = 4.5 \times 100 \text{ cm} = 450 \text{ cm}$
5. $7000 \text{ mm} = 7000 \div 1000 \text{ m} = 7 \text{ m}$
7. $3400 \text{ m} = 3400 \div 100 \text{ hm} = 34 \text{ hm}$
2. $16.5 \text{ dam} = 16.5 \times 10 \text{ m} = 165 \text{ m}$
4. $9.25 \text{ cm} = 9.25 \times 10 \text{ mm} = 92.5 \text{ mm}$
6. $2 \text{ dm} = 2 \div 10 \text{ m} = 0.2 \text{ m}$
8. $25 \text{ m} = 25 \div 10 \text{ dam} = 2.5 \text{ dam}$

Exercise 9A

1. (a) $1 \text{ km} = 1 \times 10 \text{ hm} = 10 \text{ hm}$
(c) $1 \text{ hm} = 1 \times 1000 \text{ dm} = 1000 \text{ dm}$
(e) $1 \text{ cm} = 1 \div 1000 \text{ dam} = \frac{1}{1000} \text{ dam}$
(g) $1 \text{ dm} = 1 \div 1000 \text{ hm} = \frac{1}{1000} \text{ hm}$
(b) $1 \text{ dam} = 1 \times 100 \text{ dm} = 100 \text{ dm}$
(d) $1 \text{ dm} = 1 \times 100 \text{ mm} = 100 \text{ mm}$
(f) $1 \text{ mm} = 1 \div 100 \text{ dm} = \frac{1}{100} \text{ dm}$
(h) $1 \text{ hm} = 1 \div 10 \text{ km} = \frac{1}{10} \text{ km}$
2. (a) $11.8 \text{ km} = 11.8 \times 100 = 1180 \text{ dam}$
(c) $6.25 \text{ dam} = 6.25 \times 1000 \text{ cm} = 6250 \text{ cm}$
(e) $15.3 \text{ cm} = 15.3 \div 1000 \text{ dam} = 0.0153 \text{ dam}$
(g) $25 \text{ hm} = 25 \times 100 = 2500 \text{ m}$
(i) $14 \text{ mm} = 14 \div 10 \text{ cm} = 1.4 \text{ cm}$
(k) $19 \text{ hm} = 19 \div 10 \text{ km} = 1.9 \text{ km}$
(m) $1.26 \text{ hm} = 1.26 \times 100 \text{ m} = 126 \text{ m}$
(b) $15 \text{ hm} = 15 \times 1000 \text{ dm} = 15000 \text{ dm}$
(d) $1800 \text{ mm} = 1800 \div 100 \text{ dm} = 18 \text{ dm}$
(f) $9250 \text{ dm} = 9250 \div 1000 \text{ hm} = 9.250 \text{ hm}$
(h) $2.5 \text{ dm} = 2.5 \times 10 \text{ cm} = 25 \text{ cm}$
(j) $1.85 \text{ hm} = 1.85 \times 10 \text{ dam} = 18.5 \text{ dam}$
(l) $41.9 \text{ dam} = 41.9 \div 100 \text{ km} = 0.419 \text{ km}$
(n) $25 \text{ m} = 25 \div 10 \text{ dam} = 2.5 \text{ dam}$

Class Work (Page 147)

1. (a) $412.92 \text{ m} = 412 \text{ m } 92 \text{ cm}$
(c) $6.893 \text{ km} = 6 \text{ km } 8 \text{ hm } 9 \text{ dam } 3 \text{ m}$
2. (a) $12 \text{ m } 45 \text{ cm} = 12.45 \text{ m}$
(b) $27.893 \text{ m} = 27 \text{ m } 8 \text{ dm } 9 \text{ cm } 3 \text{ mm}$
(c) $160 \text{ km } 8 \text{ hm } 9 \text{ dam } 5 \text{ m} = 160.895 \text{ km}$
(b) $2 \text{ m } 6 \text{ dm } 5 \text{ cm } 3 \text{ mm} = 2.653 \text{ m}$

Exercise 9B

1. (a) $382.14 \text{ m} = 382 \text{ m } 14 \text{ cm}$
2. (a) $5 \text{ m } 13 \text{ cm} = 5.13 \text{ m}$
(c) $4 \text{ cm } 4 \text{ mm} = 0.044 \text{ m}$
(e) $6 \text{ m } 4 \text{ dm } 7 \text{ mm} = 6.407 \text{ m}$
(b) $15.08 \text{ m} = 15 \text{ m } 8 \text{ cm}$
(b) $173 \text{ m } 2 \text{ cm} = 173.02 \text{ m}$
(d) $327 \text{ m } 5 \text{ dm } 6 \text{ cm } 8 \text{ mm} = 327.568 \text{ m}$
(f) $402 \text{ m } 7 \text{ cm } 9 \text{ mm} = 402.079 \text{ m}$

3. (a) $549.321 \text{ m} = 549 \text{ m } 3 \text{ dm } 2 \text{ cm } 1 \text{ mm}$ (b) $605.203 \text{ m} = 605 \text{ m } 2 \text{ dm } 3 \text{ mm}$
 (c) $0.759 \text{ m} = 7 \text{ dm } 5 \text{ cm } 9 \text{ mm}$ (d) $354.018 \text{ m} = 354 \text{ m } 1 \text{ cm } 8 \text{ mm}$
 (e) $935.001 \text{ m} = 935 \text{ m } 1 \text{ mm}$
4. (a) $430.756 \text{ km} = 430 \text{ km } 7 \text{ hm } 5 \text{ dam } 6 \text{ m}$ (b) $0.807 \text{ km} = 8 \text{ hm } 7 \text{ m}$
 (c) $902.405 \text{ km} = 902 \text{ km } 4 \text{ hm } 5 \text{ m}$ (d) $0.078 \text{ km} = 7 \text{ dam } 8 \text{ m}$
 (e) $603.001 \text{ km} = 603 \text{ km } 1 \text{ m}$
5. (a) $540 \text{ km } 7 \text{ hm } 3 \text{ dam } 6 \text{ m} = 540.736 \text{ km}$ (b) $5 \text{ m} = 0.005 \text{ km}$
 (c) $857 \text{ km } 2 \text{ m} = 857.002 \text{ km}$ (d) $6 \text{ hm } 3 \text{ m} = 0.603 \text{ km}$
 (e) $703 \text{ km } 8 \text{ dam } 5 \text{ m} = 703.085 \text{ km}$ (f) $839 \text{ km } 4 \text{ hm } 1 \text{ m} = 839.401 \text{ km}$

Exercise 9C

1. (a) $1 \text{ kg} = 1 \times 1000 \text{ g} = 1000 \text{ g}$ (b) $1 \text{ g} = 1 \times 1000 \text{ mg} = 1000 \text{ mg}$
 (c) $1 \text{ dag} = 1 \times 10 \text{ g} = 10 \text{ g}$ (d) $1 \text{ hg} = 1 \times 1000 \text{ dg} = 1000 \text{ dg}$
 (e) $1 \text{ dag} = 100 \text{ dg}$ (f) $1 \text{ dg} = 10 \text{ cg}$
 (g) $1 \text{ g} = \frac{1}{1000} \text{ kg}$ (h) $1 \text{ mg} = \frac{1}{10} \text{ cg}$
 (i) $1 \text{ hg} = \frac{1}{10} \text{ kg}$ (j) $1 \text{ dg} = \frac{1}{100} \text{ dag}$

2.

kg	hg	dag	g	dg	cg	mg
13.7	137	—	13700	137000	—	13700000
—	45	450	4500	—	450000	4500000
0.02178	—	2.178	21.78	217.8	2178	—
0.7002	7.002	70.02	700.2	—	70020	—
0.0014572	0.014572	—	1.4572	—	145.72	1457.2

3. The weight of an adult male lion = $190 \text{ kg} = 190 \times 1000 \text{ g} = 190000 \text{ g}$
4. Weight of cake = $3250 \text{ g} = 3250 \times \frac{1}{1000} \text{ kg} = 3.25 \text{ kg}$
5. Dosage of 1 day = $650 \text{ mg} \times 3 = 1950 \text{ mg} = 1.950 \text{ g}$
6. (a) $451.378 = 451 \text{ kg } 3 \text{ hg } 7 \text{ dag } 8 \text{ g}$ (b) $0.602 \text{ kg} = 6 \text{ hg } 2 \text{ g}$
7. (a) $418 \text{ kg } 2 \text{ hg } 5 \text{ dag } 9 \text{ g} = 418.259 \text{ kg}$ (b) $4 \text{ hg } 8 \text{ dag } 7 \text{ g} = 0.487 \text{ kg}$
 (c) $23 \text{ kg } 8 \text{ g} = 23.008 \text{ kg}$ (d) $4 \text{ dag } 2 \text{ g} = 0.042 \text{ kg}$
8. (c) $(25 \text{ hg } 9 \text{ dag} = 2.59 \text{ kg})$

Exercise 9D

1. (a) $1 \text{ kL} = 1000 \text{ mL}$ — False (b) $1 \text{ L} = 100 \text{ cL}$ — True
 (c) $1 \text{ dL} = \frac{1}{100} \text{ L}$ — False (d) $1 \text{ hL} = \frac{1}{10} \text{ kL}$ — True

- (e) 1 daL = 100 dL — True
 (g) 1 cL = 100 L — False
2. (a) 8 L = 8000 mL
 (c) 16 kL = 1600 daL
 (e) 6.254 kL = 6254 L
 (g) 2.5 L = 2.5 × 10 dL = 25 dL
- (f) 1000 mL = 1 L — True
 (h) 1 L = $\frac{1}{1000}$ kL — True
 (b) 150 dL = 150 × $\frac{1}{100}$ daL = 1.5 daL
 (d) 1875 L = 1875 × $\frac{1}{1000}$ kL = 1.875 kL
 (f) 15 hL = 15 × 1000 dL = 15000 dL
 (h) 19.4 cL = 19.4 × $\frac{1}{10}$ dL = 1.94 dL
3. A tanker has a capacity of 30 L = 30 × 1000 mL = 30000 mL
4. Capacity of a tanker = 12000 L = 12000 × $\frac{1}{1000}$ kL = 12 kL
5. (a) 529.183 L = 529 L 1 dL 8 cL 3 mL
 (b) 0.308 L = 3 dL 8 mL
6. (a) 12 L 4 dL 5 cL 2 mL = 12.452 L
 (b) 40 L 6 cL 9 mL = 40.069 L
 (c) 1 dL 9 cL = 0.190 L
 (d) 215 L 5 mL = 215.005 L

Exercise 9E

1. (a)

	m	dm
①	5	8
+	11	9
<hr/>		
	17	7

 (b)

	cm	mm
① ①	1 6	3
+	1 5	8
<hr/>		
	3 2	1

 (c)

	dm	cm
① ①	9	6
+	2 3	7
<hr/>		
	3 3	3
- (d)

	km	m
①	4 5	7 5 0
+	9 2	5 1 2
<hr/>		
	1 3 8	2 6 2

 (e)

	cm	mm
④ ⑧	1 8	8
-	4	9
<hr/>		
	1 0	9

 (f)

	m	cm
③ ⑩	1 4	8 5
-	2	8 0
<hr/>		
	1 1	8 5
- (g)

	km	m
⑦ ② ⑫	1 8 8	2 5 0
-	1 0 6	5 0 0
<hr/>		
	7 6	7 5 0

 (h)

	dm	cm
⑪ ⑫	1 2	2
-	5	8
<hr/>		
	6	4

 (i)

	kg	g
① ① ① ①	8 5	1 9 6
+	1 5	9 2 4
<hr/>		
	1 0 1	1 2 0
- (j)

	g	mg
①	5	7 5 0
+	6	5 2 3
<hr/>		
	1 2	2 7 3

 (k)

	kg	g
① ⑫ ⑬ ⑯ ⑭ ⑩	2 8 4	7 8 8
-	9 6	8 9 3
<hr/>		
	1 3 7	8 5 7

 (l)

	g	mg
⑤ ⑩ ⑩	1 8 8	8 5
-	1 2	3 7 5
<hr/>		
	3	7 3 0

$$\begin{array}{r}
 \text{(m)} \quad \text{L} \quad \text{mL} \\
 \text{① ① ①} \\
 1 \ 1 \ 8 \ 2 \ 2 \ 5 \\
 + \ 5 \ 6 \ 7 \ 8 \ 0 \\
 \hline
 1 \ 7 \ 5 \ 0 \ 0 \ 5
 \end{array}$$

$$\begin{array}{r}
 \text{(n)} \quad \text{kL} \quad \text{L} \\
 \text{① ①} \\
 1 \ 2 \ 5 \ 2 \ 5 \\
 + \ 1 \ 5 \ 4 \ 9 \ 0 \\
 \hline
 2 \ 8 \ 0 \ 1 \ 5
 \end{array}$$

$$\begin{array}{r}
 \text{(o)} \quad \text{kL} \quad \text{L} \\
 \text{④ ⑨ ⑨ ⑮} \\
 3 \ 5 \ 0 \ 0 \ 5 \\
 - \ 1 \ 2 \ 1 \ 2 \ 6 \\
 \hline
 2 \ 2 \ 8 \ 7 \ 9
 \end{array}$$

2. The length of an adult blue whale = 24 m 86 cm
 The length of an adult whale shark = 17 m 08 cm
 Adult blue whale is longer by 7 m 78 cm.

$$\begin{array}{r}
 \text{m} \quad \text{cm} \\
 24 \ 86 \\
 - \ 17 \ 08 \\
 \hline
 7 \ 78
 \end{array}$$

3. A family consumed flour in March = 30 kg 450 g
 In April they consumed less by = 5 kg 25 g
 In April they consumed flour = 25 kg 425 g
 In March they had consumed = 30 kg 450 g
 Total weight of flour consumed = 55 kg 875 g

$$\begin{array}{r}
 \text{kg} \quad \text{g} \\
 30 \ 450 \\
 - \ 5 \ 025 \\
 \hline
 25 \ 425 \\
 + \ 30 \ 450 \\
 \hline
 55 \ 875
 \end{array}$$

4. One car can hold petrol = 36 L 50 mL
 8 cars need petrol = 288 L 400 mL = 288.400 L

$$\begin{array}{r}
 \text{L} \quad \text{mL} \\
 36 \ 050 \\
 \times \ 8 \\
 \hline
 288 \ 400
 \end{array}$$

5. One jug contains lemonade = 1 L 569 mL
 Other jug contains lemonade = 1 L 719 mL
 Total lemonade = 3 L 288 mL

$$\begin{array}{r}
 \text{L} \quad \text{mL} \\
 1 \ 569 \\
 + \ 1 \ 719 \\
 \hline
 3 \ 288
 \end{array}$$

1 jug will contain lemonade = $3 \text{ L } 288 \text{ mL} \div 12 = 3288 \text{ mL} \div 12 = \underline{274 \text{ mL}}$

6. Weight of condensed milk = 215 g
 Weight of tin = 48 g
 Total weight of pack = 263 g
 Weight of 8 packs = $263 \text{ g} \times 8 = 2104 \text{ g} = 2 \text{ kg } 104 \text{ g}$

$$\begin{array}{r}
 215 \text{ g} \\
 + \ 48 \text{ g} \\
 \hline
 263 \text{ g}
 \end{array}$$

7. (b) $(1 \text{ m } 144 \text{ mm} = 1144 \text{ mm} \div 44 \text{ mm} = 26 \text{ books})$

Class Work (Page 159)

- Length of teaspoon – cm
 - Width of a table – m
 - Weight of a stack of newspapers – kg
 - Weight of hairbrush – g
 - Perfume in a bottle – mL
 - Distance of a train trip – km
 - Width of an eraser – mm
 - A tablet of Vitamin C – mg
 - A loaf of bread – g
 - Water in a fish bowl – L
 - The length of sixer hit by a batsman – m
- The thickness of this page – mm
 - The diameter of earth – km
 - The mass of an egg – g
 - The capacity of a tea cup – mL

- (e) The amount of water drawn from a well – L
 (g) The weight of a bus – t
 (i) The mass of a ceiling fan – kg
- (f) The weight of a pinch of salt – mg
 (h) The capacity of a fridge – L
 (j) The height of Mount Everest – m

Exercise 9F

1. (a) $\frac{1}{2} \text{ g} = \frac{1}{2} \times \frac{500}{1000} \text{ mg} = 500 \text{ mg}$

(c) $\frac{4}{5} \text{ kg} = \frac{4}{5} \times \frac{200}{1000} \text{ g} = 800 \text{ g}$

(e) $\frac{1}{5} \text{ kL} = \frac{1}{5} \times \frac{20}{100} \text{ daL} = 20 \text{ daL}$

(g) $\frac{3}{4} \text{ dL} = \frac{3}{4} \times \frac{25}{100} \text{ mL} = 75 \text{ mL}$

(b) $\frac{3}{5} \text{ L} = \frac{3}{5} \times \frac{20}{100} \text{ cL} = 60 \text{ cL}$

(d) $\frac{3}{4} \text{ km} = \frac{3}{4} \times \frac{250}{1000} \text{ m} = 750 \text{ m}$

(f) $\frac{2}{5} \text{ kL} = \frac{2}{5} \times \frac{2}{10} \text{ hL} = 4 \text{ hL}$

(h) $\frac{1}{2} \text{ hm} = \frac{1}{2} \times \frac{50}{100} \text{ m} = 50 \text{ m}$

2. Aryan spilt milk = $\frac{3}{4} \times \frac{200}{5} \text{ L} = \frac{3}{4} \times \frac{200}{1000} \text{ mL} = 600 \text{ mL}$

3. A basket contains 3 kg 705 g = 3705 g mangoes

Mangoes eaten = $\frac{2}{3} \times \frac{1235}{3705} \text{ g} = 2470 \text{ g}$

Remaining mangoes = 3705 g – 2470 g = 1235 g

Rinki gets mangoes = $\frac{2}{3} \times \frac{247}{1235} \text{ g} = 494 \text{ g}$

4. (a) Total distance travelled by Vedant = $\frac{7}{10} \text{ km} + \frac{3}{4} \text{ km} = \frac{14 \text{ km} + 15 \text{ km}}{20}$
 $= \frac{29}{20} \text{ km} = \frac{29}{20} \times \frac{50}{1000} \text{ m} = 1450 \text{ m}$

(b) $\frac{29}{20} \text{ km} = 1.45 \text{ km}$

5. (d) $\left(\frac{4}{5} \text{ kg} = \frac{4}{5} \times \frac{200}{1000} \text{ g} = 800 \text{ g} \div 5 = 160 \text{ g in each packet} \right)$

Mental Maths

- 1 dg = 100 mg
- 1 km = 10000 dm
- 1 hL = 100000 mL
- 80 g = 80 ÷ 1000 kg = 0.080 kg
- 5.62 hm = 5.62 × 10000 cm = 56200 cm

$$6. \frac{1}{4} \text{ of } 1 \text{ L} = \frac{1}{4} \times 10 \text{ dal} = 2.5 \text{ dal}$$

$$7. \frac{2}{5} \text{ of } 1 \text{ g} = \frac{2}{5} \times 10^2 \text{ dg} = 4 \text{ dg}$$

$$8. 0.728 \text{ dag} = 0.728 \times 100 \text{ dg} = 72.8 \text{ dg}$$

Chapter Test

$$1. (a) 42.195 \text{ km} = 42.195 \times 10000 \text{ dm} = 421950 \text{ dm}$$

$$(b) (i) 163 \text{ g} = \frac{163}{100} \text{ hg} = 1.63 \text{ hg}$$

$$(ii) 163 \text{ g} = 163 \times 1000 \text{ mg} = 163000 \text{ mg}$$

$$(c) 25 \text{ lakh L} = 2500000 \text{ L} = 2500000 \times \frac{1}{1000} \text{ kL} = 2500 \text{ kL}$$

$$2. (a) 1 \text{ kg}$$

$$(b) 8050 \text{ m}$$

$$(c) 700 \text{ hL}$$

$$3. (a) 4.25 \text{ km} = 425 \text{ dam}$$

$$(b) 17.08 \text{ m} = 17080 \text{ mm}$$

$$(c) 6.58 \text{ cm} = 0.658 \text{ dm}$$

$$(d) 348 \text{ hg} = 34.8 \text{ kg}$$

$$(e) 6.17 \text{ dag} = 61700 \text{ mg}$$

$$(f) 45 \text{ mL} = 0.45 \text{ dL}$$

$$(g) 22.09 \text{ daL} = 0.2209 \text{ kL}$$

$$(h) 785 \text{ L} = 7.85 \text{ hL}$$

$$4. (a) \text{ Weight of Box A} = 6 \text{ kg } 35 \text{ g}$$

$$\text{Weight of Box B} = 6 \text{ kg } 35 \text{ g} \times 3 = 18 \text{ kg } 105 \text{ g}$$

$$\text{Total weight of 2 boxes} = 24 \text{ kg } 140 \text{ g.}$$

kg	g
6	035
18	105
24	140

$$(b) \text{ Weight of biscuits} = 15 \text{ kg } 097 \text{ g} = 15097 \text{ g}$$

kg	g
15	097
15	097

$$5. \text{ Length of 1 bookmark} = 2 \text{ m } 55 \text{ cm} = 255 \text{ cm} \div 17 = 15 \text{ cm}$$

$$\text{Length of 68 such bookmarks} = 1020 \text{ cm} = 10.20 \text{ m}$$

15	68
120	90
1020	

$$6. (c)$$

$$7. (d)$$

$$8. (d) \left(\frac{3}{4} \times 5 \text{ L} = \frac{3}{4} \times 50^{\frac{25}{100}} \text{ dL} = \frac{75}{2} \text{ dL} = 37.5 \text{ dL} \right)$$

$$9. (c) \{ 5 \text{ m } 40 \text{ cm} = 540 \text{ cm} \times \frac{1}{3} = 180 \text{ cm}, 360 \times \frac{1}{5} = 72 \text{ cm} \}$$

$$\begin{aligned} \text{Painted green} &= 540 \text{ cm} - (180 \text{ cm} + 72 \text{ cm}) = 540 \text{ cm} - 252 \text{ cm} \\ &= 288 \text{ cm} = 288 \times 10 \text{ mm} = 2880 \text{ mm} \end{aligned}$$

10. (b) Capacity of 2 bottles = 1 L 120 mL = 1120 mL \times 2 = 2240 mL,
Oil in 1 bottle = 2240 mL \div 5 = 448 mL

Challenge!

Mr. Madan gave honey to her friend = 1 L 160 mL = $\frac{145}{1160}$ mL \times $\frac{5}{8}$ = 725 mL

Remaining honey = 1160 mL - 725 mL = 435 mL

Honey spread over sandwiches = $\frac{87}{435}$ mL \times $\frac{4}{8}$ = 348 mL

Remaining honey = 435 mL - 348 mL = 87 mL = 0.087 L

Model Test Paper-1

- Twenty million is 1000 times twenty thousand
 - Roman numeral representing 175 = CLXXV
 - The estimated quotient of $4423 \div 21 = 4200 \div 20 = 210$
 - The number 451002 * is divisible by 5 and 10. * equals 0
 - $\frac{5}{8}$ of 2 hours 40 min = $\frac{5}{8} \times \frac{20}{160}$ min = 100 min = 1 h 40 min
 - $0.0032 \div 0.8 = 0.032 \div 8 = 0.004$ (g) 60 km 2 dam 5 m = 60.025 km
- 25,89,540 rounded off to the nearest thousand is 25,90,000 - True
 - $24 \div 12 + 1000 - 993$ equals 1 - False (c) $5\frac{2}{5}$ kg in grams equals 5200 g - False
 - $\frac{7}{25}$ as a decimal is 0.28 - True (e) LCM of 17 and 5 is 85 - True
- (c)
- (b) $\{84 = 2 \times 2 \times 3 \times 7, 98 = 2 \times 7 \times 7, \text{Greatest common factor} = 2 \times 7 = 14\}$
- (c) $\{3 \times [(2 \times 6 - 5) + (8 \div 4)] - 1 = 3 \times [(7) + (2)] - 1 = 3 \times 9 - 1 = 27 - 1 = 26\}$
- (a) $\left\{ \text{Sugar used} = \frac{18^6}{5} \times \frac{1}{8} = \frac{6}{5} = 1\frac{1}{5} \text{ cups} \right\}$
- (b)
- (b) $\left\{ \frac{347}{20} \text{ m} - \frac{57}{4} \text{ m} = \left(\frac{347 - 285}{20} \right) \text{ m} = \frac{62}{20} \text{ m} = \frac{62}{20} \times 100 \text{ cm} = 310 \text{ cm} \right\}$
- $\frac{A}{5} = 21$ as $21 + 3 = 24$ and $21 - 3 = 18$, $A = 21 \times 5 = 105$
- $5,225 \times 6,791 = 3,54,82,975$

In words: Three crore fifty-four lakh eighty-two thousand nine hundred seventy-five

$$\begin{array}{r}
 11. \ 2 \overline{) 24, 36, 42, 60} \\
 \quad 2 \overline{) 12, 18, 21, 30} \\
 \quad \quad 3 \overline{) 6, 9, 7, 15} \\
 \quad \quad \quad 2, 3, 7, 5
 \end{array}$$

$$\text{LCM} = 2 \times 2 \times 2 \times 3 \times 3 \times 7 \times 5 = 2520$$

$$12. \text{ Total pizza} = \frac{3}{8}, \text{ Remaining pizza} = \frac{1}{1} - \frac{3}{8} = \frac{5}{8}$$

$$\text{He gave to his friend} = \frac{1}{3} \times \frac{5}{8} = \frac{5}{24}$$

$$\text{Pizza left with him} = \frac{5}{8} - \frac{5}{24} = \frac{15 - 5}{24} = \frac{10}{24} = \frac{5}{12}$$

$$13. \text{ Number of parts of a line} = \frac{56.7 \text{ cm}}{6.3 \text{ cm}} = \frac{567}{63} = 9 \text{ parts}$$

$$14. \text{ Pure apple juice} = 5.42 \text{ L} = 5420 \text{ mL}$$

$$\text{Water added} = 2 \times 5420 \text{ mL} = 10840 \text{ mL}$$

$$\text{Total apple juice} = 16260 \text{ mL}$$

$$\text{Diluted juice filled in 12 glasses} = 325 \text{ mL} \times 12 = 3900 \text{ mL}$$

$$\text{Amount of juice left} = 12360 \text{ mL} = 12.36 \text{ L}$$

$$\begin{array}{r}
 5420 \text{ mL} \\
 + 10840 \text{ mL} \\
 \hline
 16260 \text{ mL} \\
 - 3900 \text{ mL} \\
 \hline
 12360 \text{ mL}
 \end{array}$$