

NEW ERA PUBLIC SCHOOL

Subject: → Math

Class: → 5th

Session: → 2021

Solved Assignment of Unit 2nd

Exercise: → 8

[Math A]

Add the numbers.

$$\begin{array}{r}
 (a) \quad 7 \ 6 \ 9 \ 8 \ 6 \ 4 \\
 + \ 4 \ 7 \ 3 \ 1 \ 6 \\
 \hline
 8 \ 1 \ 7 \ 1 \ 8 \ 0
 \end{array}$$

$$\begin{array}{r}
 (b) \quad 1 \ 2 \ 0 \ 3 \ 5 \ 4 \ 6 \ 8 \\
 \quad \quad 3 \ 1 \ 6 \ 2 \ 3 \ 1 \ 1 \\
 + \quad \quad 2 \ 1 \ 6 \ 0 \ 2 \ 1 \\
 \hline
 1 \ 5 \ 4 \ 1 \ 3 \ 8 \ 0 \ 0
 \end{array}$$

$$\begin{array}{r}
 (c) \quad 9 \ 9 \ 9 \ 9 \ 9 \ 9 \\
 \quad \quad \quad \quad 9 \ 9 \ 9 \\
 + \quad \quad \quad \quad 9 \ 9 \\
 \hline
 1 \ 0 \ 0 \ 1 \ 0 \ 9 \ 7
 \end{array}$$

Exercise: → 9

1: Subtract and check the answers.

$$\begin{array}{r}
 (a) \quad 1 \ 9 \ 8 \ 7 \ 6 \\
 - \ 1 \ 3 \ 0 \ 9 \ 5 \\
 \hline
 6 \ 7 \ 8 \ 1
 \end{array}$$

Check: $\rightarrow$

$$\begin{array}{r}
 13095 \\
 + 6781 \\
 \hline
 19876
 \end{array}$$

$$\begin{array}{r}
 (b) \quad 8421987 \\
 - 6889099 \\
 \hline
 1532888
 \end{array}$$

Check: $\rightarrow$

$$\begin{array}{r}
 6889099 \\
 + 1532888 \\
 \hline
 8421987
 \end{array}$$

$$\begin{array}{r}
 (c) \quad 204653 \\
 - 178734 \\
 \hline
 25919
 \end{array}$$

Check: $\rightarrow$

$$\begin{array}{r}
 178734 \\
 + 25919 \\
 \hline
 204653
 \end{array}$$

$$\begin{array}{r}
 (d) \quad 400100 \\
 - 28735 \\
 \hline
 371365
 \end{array}$$

Check: $\rightarrow$

$$\begin{array}{r}
 371365 \\
 + 28735 \\
 \hline
 400100
 \end{array}$$

$$\begin{array}{r}
 (e) \quad 5 \ 4 \ 0 \ 3 \ 4 \ 6 \ 7 \\
 - 2 \ 2 \ 5 \ 0 \ 9 \ 8 \ 1 \\
 \hline
 3 \ 1 \ 5 \ 2 \ 4 \ 8 \ 6
 \end{array}$$

Check : $\rightarrow$

$$\begin{array}{r}
 3 \ 1 \ 5 \ 2 \ 4 \ 8 \ 6 \\
 + 2 \ 2 \ 5 \ 0 \ 9 \ 8 \ 1 \\
 \hline
 5 \ 4 \ 0 \ 3 \ 4 \ 6 \ 7
 \end{array}$$

$$\begin{array}{r}
 (f) \quad 7 \ 0 \ 1 \ 0 \ 1 \ 0 \ 0 \\
 - 8 \ 8 \ 0 \ 8 \ 8 \\
 \hline
 6 \ 9 \ 2 \ 2 \ 0 \ 1 \ 2
 \end{array}$$

Check : $\rightarrow$

$$\begin{array}{r}
 6 \ 9 \ 2 \ 2 \ 0 \ 1 \ 2 \\
 + 8 \ 8 \ 0 \ 8 \ 8 \\
 \hline
 7 \ 0 \ 1 \ 0 \ 1 \ 0 \ 0
 \end{array}$$

$$\begin{array}{r}
 (g) \quad 4 \ 0 \ 0 \ 0 \ 0 \ 0 \\
 - 2 \ 9 \ 7 \ 8 \ 6 \ 9 \\
 \hline
 1 \ 0 \ 2 \ 1 \ 3 \ 1
 \end{array}$$

Check : $\rightarrow$

$$\begin{array}{r}
 2 \ 9 \ 7 \ 8 \ 6 \ 9 \\
 + 1 \ 0 \ 2 \ 1 \ 3 \ 1 \\
 \hline
 4 \ 0 \ 0 \ 0 \ 0 \ 0
 \end{array}$$

$$\begin{array}{r}
 (h) \quad 6 \ 0 \ 0 \ 2 \ 0 \ 0 \ 0 \\
 - 3 \ 8 \ 9 \ 8 \ 9 \\
 \hline
 5 \ 9 \ 6 \ 3 \ 0 \ 1 \ 1
 \end{array}$$

Check :→

$$\begin{array}{r}
 5963011 \\
 + 38989 \\
 \hline
 6002000
 \end{array}$$

2: Evaluate :→

(a) $6098 + 37653 - 2163$

$$\begin{array}{r}
 6098 \\
 + 37653 \\
 \hline
 43751
 \end{array}$$

$$\begin{array}{r}
 43751 \\
 - 2163 \\
 \hline
 41588
 \end{array}$$

(b) $222346 + 898 - 60601$

$$\begin{array}{r}
 222346 \\
 + 898 \\
 \hline
 223244
 \end{array}$$

$$\begin{array}{r}
 223244 \\
 - 60601 \\
 \hline
 162643
 \end{array}$$

(c) $65678 + 56876 - 34289$

$$\begin{array}{r}
 65678 \\
 + 56876 \\
 \hline
 122554
 \end{array}$$

$$\begin{array}{r}
 122554 \\
 - 34289 \\
 \hline
 88265
 \end{array}$$

(d) $625982 + 99 - 8675$

$$\begin{array}{r}
 625982 \\
 + 99 \\
 \hline
 626081
 \end{array}$$

$$\begin{array}{r}
 626081 \\
 - 8675 \\
 \hline
 617406
 \end{array}$$

(e) $209273 + 60457 - 189236$

$$\begin{array}{r} 209273 \\ + 60457 \\ \hline 269730 \end{array}$$

$$\begin{array}{r} 269730 \\ - 189236 \\ \hline 80494 \end{array}$$

$$(f) \quad 456123 + 123456 - 21268$$

$$\begin{array}{r} 456123 \\ + 123456 \\ \hline 579579 \end{array}$$

$$\begin{array}{r} 579579 \\ - 21268 \\ \hline 558311 \end{array}$$

Exercise :-> 10

1: Multiply :-> [Practice remaining parts yourself].

$$(a) \quad \begin{array}{r} 23 \times 32 \\ 46 \\ 69 \times \\ \hline 736 \end{array}$$

$$(c) \quad \begin{array}{r} 68 \times 29 \\ 612 \\ 136 \times \\ \hline 1972 \end{array}$$

$$(e) \quad \begin{array}{r} 143 \times 13 \\ 429 \\ 143 \times \\ \hline 1859 \end{array}$$

$$(g) \quad \begin{array}{r} 253 \times 31 \\ 253 \\ 759 \times \\ \hline 7843 \end{array}$$

$$(i) \quad \begin{array}{r} 514 \times 74 \\ 2056 \\ 3598 \times \\ \hline 38036 \end{array}$$

$$(k) \quad \begin{array}{r} 317 \times 23 \\ 951 \\ 634 \times \\ \hline 7291 \end{array}$$

2: Multiply $\Rightarrow$ [Practice remaining parts yourself].

$$\begin{array}{r} \text{(a)} \quad 316 \times 23 \\ \underline{948} \\ 632x \\ \underline{7268} \end{array}$$

$$\begin{array}{r} \text{(c)} \quad 4371 \times 32 \\ \underline{8742} \\ 13113x \\ \underline{139872} \end{array}$$

$$\begin{array}{r} \text{(e)} \quad 3162 \times 300 \\ \underline{0000} \\ 0000x \\ 9486xx \\ \underline{948600} \end{array}$$

$$\begin{array}{r} \text{(g)} \quad 5342 \times 21 \\ \underline{5342} \\ 10684x \\ \underline{112182} \end{array}$$

$$\begin{array}{r} \text{(i)} \quad 3105 \times 123 \\ \underline{9315} \\ 6210x \\ 3105xx \\ \underline{381915} \end{array}$$

$$\begin{array}{r} \text{(k)} \quad 4307 \times 106 \\ \underline{25842} \\ 0000x \\ 4307xx \\ \underline{456542} \end{array}$$

$$\begin{array}{r} \text{(m)} \quad 3123 \times 41 \\ \underline{3123} \\ 12492x \\ \underline{128043} \end{array}$$

$$\begin{array}{r} \text{(o)} \quad 6009 \times 410 \\ \underline{0000} \\ 6009x \\ 24036xx \\ \underline{2463690} \end{array}$$

$$\begin{array}{r} \text{(p)} \quad 1245 \times 29 \\ \underline{11205} \\ 2490x \\ \underline{36105} \end{array}$$

(s) 9842×38

$$\begin{array}{r} 78736 \\ 29526 \times \\ \hline 373996 \end{array}$$

(u) 5544×312

$$\begin{array}{r} 11088 \\ 5544 \times \\ \hline 16632 \times \times \\ \hline 1729728 \end{array}$$

3: Multiply $\rightarrow$ [Practice remaining parts yourself]

(a) 2300×20

$$\begin{array}{r} 0000 \\ 4600 \times \\ \hline 46000 \end{array}$$

(c) 23000×2000

$$\begin{array}{r} 00000 \\ 00000 \times \\ \hline 00000 \times \times \\ \hline 46000 \times \times \times \\ \hline 46000000 \end{array}$$

(e) 380×120

$$\begin{array}{r} 000 \\ 760 \times \\ \hline 380 \times \times \\ \hline 45600 \end{array}$$

(g) 4410×40

$$\begin{array}{r} 0000 \\ 17640 \times \\ \hline 176400 \end{array}$$

(i) 1810×1100

$$\begin{array}{r} 0000 \\ 0000 \times \\ \hline 1810 \times \times \\ \hline 1810 \times \times \times \\ \hline 1991000 \end{array}$$

(k) 8431×68

$$\begin{array}{r} 67448 \\ 50586 \times \\ \hline 573308 \end{array}$$

4: Find the missing numbers:→

(a) $2000 \times \underline{36} = 72000$

(b) $16000 \times \underline{3} = 48000$

(c) $5000 \times \underline{20} = 100000$

(d) $96000 \times \underline{58} = 5568000$

(e) $4000 \times \underline{20} = 80000$

(f) $8000 \times \underline{4} = 32000$

(g) $\underline{50} \times 6000 = 300000$

(h) $\underline{27} \times 7000 = 189000$

Exercise :→ 11

Fill in the each box with the correct single digit number.

1) $2 \boxed{8}$

$\times 7$

196

(2) $\boxed{6} 0 8$

$\times 6$

3648

3) 246

$5 \boxed{3} 1$

$+ 709$

1566

(4) 444

$\times \boxed{6}$

2664

5) $4 \boxed{3}$

$+ 59$

102

(6) 5246

$+ 7 \boxed{1} 55$

$124 \boxed{0} 1$

$$\begin{array}{r}
 7) \quad 5 \\
 \quad 1 \\
 \quad 9 \\
 \quad \boxed{8} \\
 + 6 \\
 \hline
 \quad 29
 \end{array}$$

$$\begin{array}{r}
 (8) \quad \begin{array}{r} \boxed{1} \ 3 \\ 9 \overline{) 1 \ \boxed{1} \ 7} \\ \underline{ 9} \\ \boxed{2} \ 7 \\ \underline{ 2} \ 7 \end{array}
 \end{array}$$

Exercise : $\rightarrow$ 12 [Practice remaining parts yourself]

1. Divide to find the quotient and the remainder. Also check your answers.

(a) $28826 \div 42$

$$\begin{array}{r}
 686 \\
 42 \overline{) 28826} \\
 \underline{252} \\
 362 \\
 \underline{336} \\
 266 \\
 \underline{252} \\
 14
 \end{array}$$

Check: $\rightarrow$ Quotient $\times$ Divisor + Remainder.

$$\text{Divident} = 686 \times 42 + 14$$

$$28812 + 14$$

$$= 28826.$$

(c) $33116 \div 38$

$$\begin{array}{r}
 871 \\
 38 \overline{) 33116} \\
 \underline{304} \\
 271 \\
 \underline{266} \\
 56 \\
 \underline{38} \\
 18
 \end{array}$$

Check $\rightarrow$ Quotient $\times$ Divisor + Remainder

$$\begin{aligned}
 \text{Divident} &= 871 \times 38 + 18 \\
 &= 33098 + 18 \\
 &= 33116.
 \end{aligned}$$

(e) $50077 \div 23$

$$\begin{array}{r}
 2177 \\
 23 \overline{) 50077} \\
 \underline{46} \\
 40 \\
 \underline{23} \\
 177 \\
 \underline{161} \\
 167 \\
 \underline{161} \\
 6
 \end{array}$$

Check $\rightarrow$ Quotient $\times$ Divisor + Remainder

$$\begin{aligned}
 \text{Divident} &= 2177 \times 23 + 6 \\
 &= 50071 + 6 = 50077
 \end{aligned}$$

(g) $85732 \div 61$

$$\begin{array}{r} 1405 \\ 61 \overline{) 85732} \\ \underline{61} \\ 247 \\ \underline{244} \\ 332 \\ \underline{305} \\ 27 \end{array}$$

Check $\Rightarrow$ Quotient $\times$ Divisor + Remainder

$$\text{Divident} = 1405 \times 61 + 27$$

$$= 85705 + 27 = 85732$$

(i) $41536 \div 48$

$$\begin{array}{r} 865 \\ 48 \overline{) 41536} \\ \underline{384} \\ 313 \\ \underline{288} \\ 256 \\ \underline{240} \\ 16 \end{array}$$

Check $\Rightarrow$ Quotient $\times$ Divisor + Remainder

$$\text{Divident} = 865 \times 48 + 16$$

$$= 41520 + 16$$

$$= 41536$$

(K) $22366 \div 123$

$$\begin{array}{r}
 181 \\
 123 \overline{) 22366} \\
 \underline{123} \\
 1006 \\
 \underline{984} \\
 226 \\
 \underline{123} \\
 103
 \end{array}$$

Check: $\rightarrow$ Quotient $\times$ Divisor + Remainder

$$\begin{aligned}
 \text{Divident} &= 181 \times 123 + 103 \\
 &= 22263 + 103 \\
 &= 22366
 \end{aligned}$$

(m) $49388 \div 246$

$$\begin{array}{r}
 200 \\
 246 \overline{) 49388} \\
 \underline{49200} \\
 188
 \end{array}$$

Check: $\rightarrow$ Quotient $\times$ Divisor + Remainder

$$\begin{aligned}
 \text{Divident} &= 200 \times 246 + 188 \\
 &= 49200 + 188 \\
 &= 49388
 \end{aligned}$$

(n) $40810 \div 203$

$$\begin{array}{r}
 201 \\
 203 \overline{) 40810} \\
 \underline{406} \\
 210 \\
 \underline{203} \\
 7
 \end{array}$$

check $\Rightarrow$ Quotient $\times$ Divisor + Remainder

$$\begin{aligned}
 \text{Divident} &= 201 \times 203 + 7 \\
 &= 40803 + 7 \\
 &= 40810.
 \end{aligned}$$

(9) $20706 \div 222$

$$\begin{array}{r}
 93 \\
 222 \overline{) 20706} \\
 \underline{1998} \\
 726 \\
 \underline{666} \\
 60
 \end{array}$$

check $\Rightarrow$ Quotient $\times$ Divisor + Remainder

$$\begin{aligned}
 \text{Divident} &= 93 \times 222 + 60 \\
 &= 20646 + 60 \\
 &= 20706.
 \end{aligned}$$

2: Solve the division problems.

(a) Question on book.

sol. Total no. of bananas = 28128

No. of bananas in 1 dozen = 12

$\therefore$ No. of dozens in 28128 bananas =

$$\begin{array}{r}
 12 \overline{) 28128} \quad 2344 \\
 \underline{24} \\
 41 \\
 \underline{36} \\
 52 \\
 \underline{48} \\
 48 \\
 \underline{48} \\
 x
 \end{array}$$

= 2344 dozens.

(b) Question on book.

Sol. Total amount of Cement = 28670 Kg

Cement to be put in each bag = 62 Kg

$\therefore$ No. of bags full = $28670 \div 62$

$$62 \overline{) 28670} \quad 462 \quad = 462.$$

$$\underline{248}$$

$$387$$

$$\underline{372}$$

$$150$$

$$\underline{124}$$

$$26$$

$\therefore$ Cement left-over = 26 Kg

(c) Question on book.

Sol. Total no. of children in school = 5911

Total no. of classes given = 23

$\therefore$ No. of children in each class = $5911 \div 23$

$$\begin{array}{r}
 23 \overline{) 5911} \quad 257 \\
 \underline{46} \\
 131 \\
 \underline{115} \\
 161 \\
 \underline{161} \\
 \hline
 \times
 \end{array}$$

$\therefore$ No. of children in each class = 257

(d) Question on book.

sol. Total no. of bottles in a factory = 7350

No. of bottles to be packed in each box = 102

$\therefore$ No. of boxes fully packed = $7350 \div 102$

$$\begin{array}{r}
 102 \overline{) 7350} \quad 72 \\
 \hline
 714 \\
 \underline{210} \\
 204 \\
 \underline{7} \\
 0
 \end{array}
 \quad = 72$$

$\therefore$ No. of bottles left = 7

(e) Question on book.

sol. Total no. of people = 3

Distance to be covered by them = 168 Km

Distance covered by each person = $168 \div 3$
 $= 56 \text{ Km}$

$$3 \overline{) 168} \mid 56$$

$$\underline{15}$$

$$18$$

$$\underline{18}$$

x

∴ Distance covered by each person
in all = $\frac{56 \times 2}{112 \text{ Km}}$

(f) Question on book.

Sol. Total no. of T.V sets = 250

Cost of 250 T.V sets = Rs 26,25,000

∴ Cost of 1 T.V set = $26,25,000 \div 250$

$$250 \overline{) 26,25,000} \parallel 10500$$

$$\underline{250}$$

$$1250$$

$$\underline{1250}$$

x

= Rs 10500

(g) Question on book.

Sol:- Total no. of toys distributed = 30000

Total no. of children = 115

No. of toys got by each children =

$$30000 \div 115$$

= 260 toys

$$\begin{array}{r}
 115 \overline{) 30000} \mid 260 \\
 \underline{230} \\
 700 \\
 \underline{690} \\
 100
 \end{array}$$

No. of toys left = 100.

(b) Question on book.

sol. Amount donated by Kiran = Rs 55000

Amount donated by Maya = Rs 60800

Total amount donated by both =

$$\begin{array}{r}
 55000 \\
 + 60800 \\
 \hline
 \end{array}$$

Rs 115800

Amount donated among = 300 poor.

$\therefore$ Amount got by each poor =

$$115800 \div 300$$

$$300 \overline{) 115800} \mid 386$$

$$\begin{array}{r}
 \underline{900} \\
 2580 \\
 \underline{2400} \\
 1800 \\
 \underline{1800}
 \end{array}$$

$\therefore$ Each poor got = Rs 386.

(i) Question on book.

sol. Total no. of students = 13680

Total no. of groups = 60

$\therefore$ No. of students in each group =

$$13680 \div 60$$

$$60 \overline{)13680} \quad 228$$

$$\underline{120}$$

$$168$$

$$\underline{120}$$

$$480$$

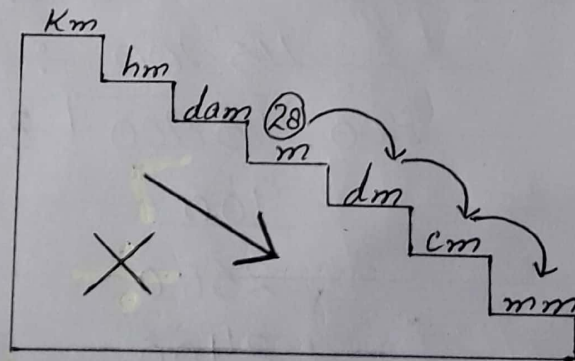
$$\underline{480}$$

$$X$$

Exercise $\rightarrow$ 66 [Math B]

1: Convert the following with the help of the staircase method.

(a) 28 m to mm



From m to mm, there are 3 jumps
($10 \times 10 \times 10 = 1000$)

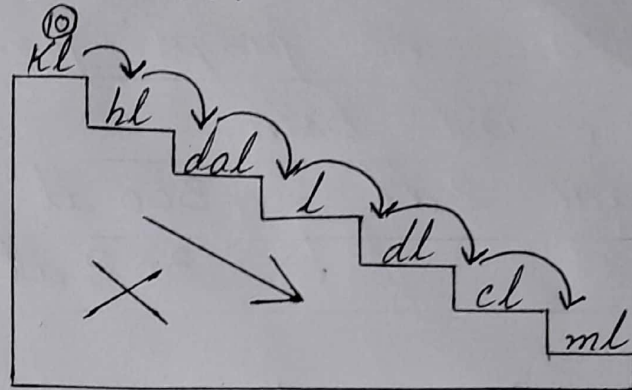
Multiply 28 m by 1000

$$28m = 28 \times 1000$$

$$= 28000 \text{ mm}$$

$$\therefore 28 \text{ m} = 28000 \text{ mm}$$

(c) 10 Kl to ml.



From Kl to ml, there are 6 jumps
 $(10 \times 10 \times 10 \times 10 \times 10 \times 10 = 1000000)$

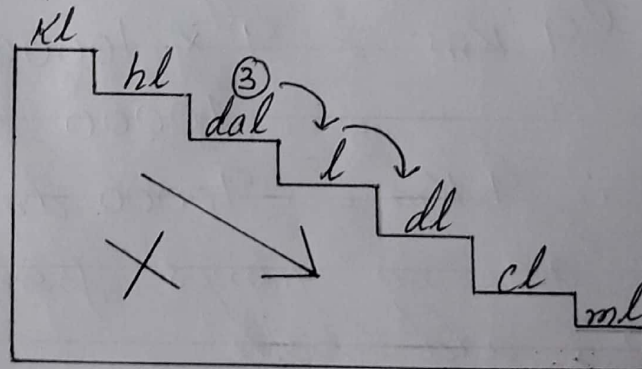
Multiply 10 Kl by 1000000.

$$10 \text{ Kl} = 10 \times 1000000 \text{ ml}$$

$$= 10000000 \text{ ml}$$

$$\therefore 10 \text{ Kl} = 10000000 \text{ ml}$$

(e) 3 dal 2 dl to dl.



From dal to dl, there are 2 jumps
 $(10 \times 10 = 100)$

Multiply 3dal by 100

$$3dal = 3 \times 100$$

$$= 300 dl$$

$$\therefore 3dal = 300 dl$$

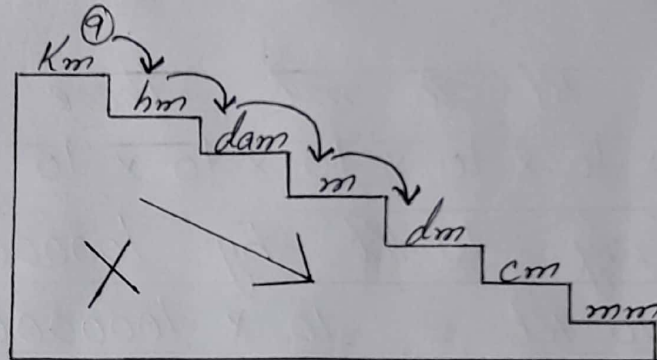
There are no jumps from 2dl to dl

Now, add both

$$3dal \ 2dl = 300 dl + 2 dl$$

$$= 302 dl.$$

(g) 9Km 3 dm to dm.



From Km to dm, there are 4 jumps

$$(10 \times 10 \times 10 \times 10 = 10000)$$

Multiply 9 Km by 10000

$$9 Km = 9 \times 10000$$

$$= 90000 dm$$

$$\therefore 9 Km = 90000 dm.$$

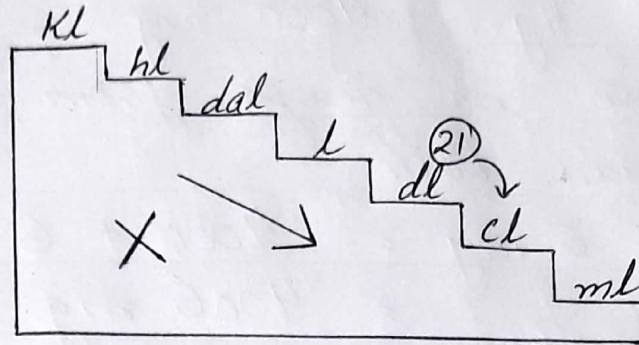
There are no jumps from 3 dm to dm

Now, add both

$$9 Km \ 3 dm = 90000 dm + 3 dm$$

$$= 90003 dm.$$

(i) 21 dl 8 cl to cl



From dl to cl, there is 1 jumps = 10
Multiply 21dl by 10.

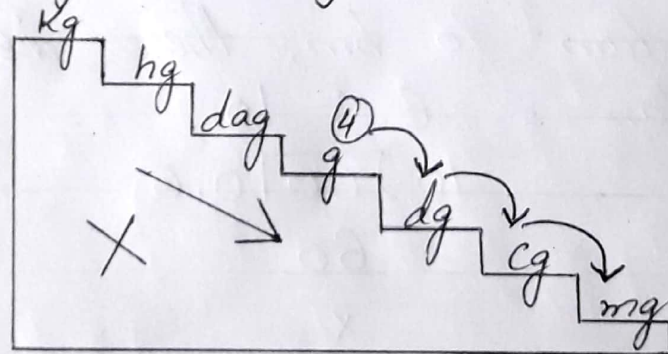
$$21 \text{ dl} = 10 \times 21$$

$$\therefore 21 \text{ dl} = 210 \text{ cl.}$$

There are no jumps from 8 cl to cl
Now, add both.

$$21 \text{ dl } 8 \text{ cl} = 210 + 8 \\ = 218 \text{ cl.}$$

(K) 4 g 6 mg to mg.



From g to mg, there are 3 jumps
($10 \times 10 \times 10 = 1000$)

Multiply 4g by 1000

$$4g = 4 \times 1000$$

$$\therefore 4g = 4000 \text{ mg}$$

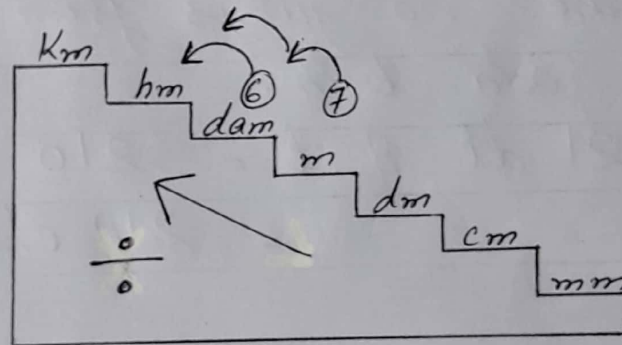
There are no jumps from 6 mg to mg
Now, add both.

$$\begin{aligned} 4g \ 6 \text{ mg} &= 4000 + 6 \\ &= 4006 \text{ mg.} \end{aligned}$$

Exercise $\Rightarrow$ 67 [Practice remaining parts yourself]

1: Convert the following With the help of staircase method.

(a) 6 dam 7m to hm.



From dam to hm, there is 1 jump = $\frac{1}{10}$

$$6 \text{ dam} = 6 \div 10$$

$$10 \overline{) 60} 0.6$$

$$\underline{60}$$

x

$$\therefore 6 \text{ dam} = 0.6 \text{ hm.}$$

From m to hm, there are 2 jumps

$$\left(\frac{1}{10} \times \frac{1}{10} = \frac{1}{100} \right)$$

$$7m = 7 \div 100$$

$$100 \overline{) 700} 0.07$$

$$\underline{700}$$

x

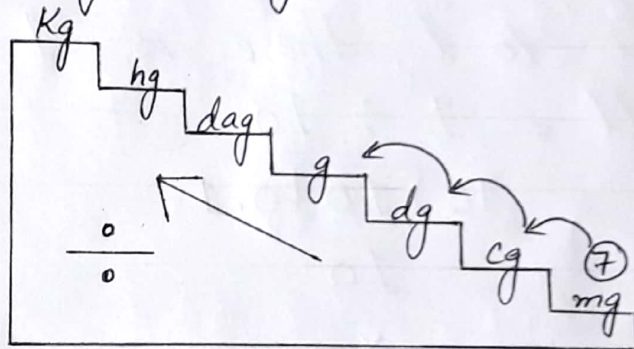
$$\therefore 7m = 0.07 \text{ hm.}$$

Add both. (6 dam = 0.6 hm) and (7m = 0.07 hm)

$$6 \text{ dam} + 7m = 0.6 + 0.07$$

$$\therefore 6 \text{ dam } 7m = 0.67 \text{ hm.}$$

(c) 7g 7mg to g.



From 7g to g, there are no jumps.

From mg to g, there are 3 jumps

$$(\frac{1}{10} \times \frac{1}{10} \times \frac{1}{10} = \frac{1}{1000})$$

$$7mg = 7 \div 1000$$

$$1000 \overline{) 7000} 0.007$$

$$\underline{7000}$$

x

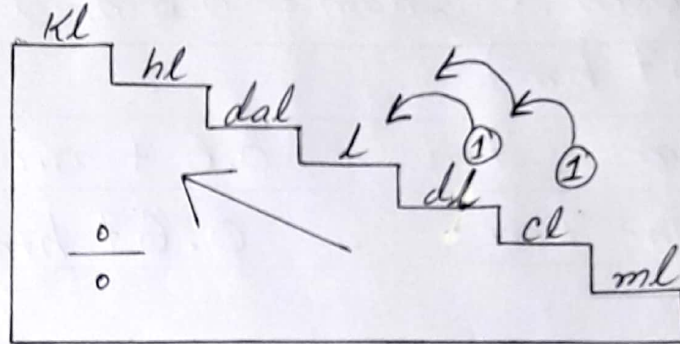
$$7mg = 0.007 \text{ g.}$$

Now, Add both (7g) and (7mg = 0.007 g)

$$7g + 7mg = 7 + 0.007.$$

$$\therefore 7g + 7mg = 7.007g.$$

(e) 1 dl 1 cl to l.



From dl to l, there is 1 jump = $\frac{1}{10}$

$$1 \text{ dl} = 1 \div 10$$

$$10 \overline{) 10} | 0.1$$

$$\underline{10}$$

x

$$\therefore 1 \text{ dl} = 0.1 \text{ l}$$

From cl to l, there are 2 jumps.

$$\left(\frac{1}{10} \times \frac{1}{10} = \frac{1}{100} \right)$$

$$1 \text{ cl} = 1 \div 100$$

$$100 \overline{) 100} | 0.01$$

$$\underline{100}$$

x

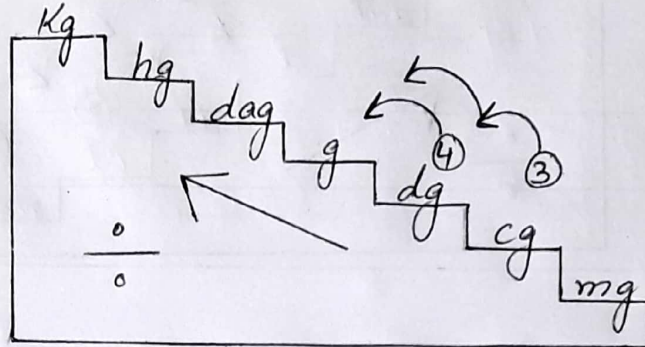
$$\therefore 1 \text{ cl} = 0.01 \text{ l}$$

Add both (1 dl = 0.1 l) and (1 cl = 0.01 l)

$$1dl + 1cl = 0.1 + 0.01$$

$$1dl \ 1cl = 0.11l.$$

(g) 4 dg 3 cg to g



From dg to g, there is 1 jump = $\frac{1}{10}$

$$4dg = 4 \div 10$$

$$\begin{array}{r} 10 \overline{) 40} \quad 0.4 \\ \underline{40} \\ 0 \end{array}$$

x

$$4dg = 0.4g$$

From cg to g, there are 2 jumps
($\frac{1}{10} \times \frac{1}{10} = \frac{1}{100}$)

$$3cg = 3 \div 100$$

$$\begin{array}{r} 100 \overline{) 300} \quad 0.03 \\ \underline{300} \\ 0 \end{array}$$

x

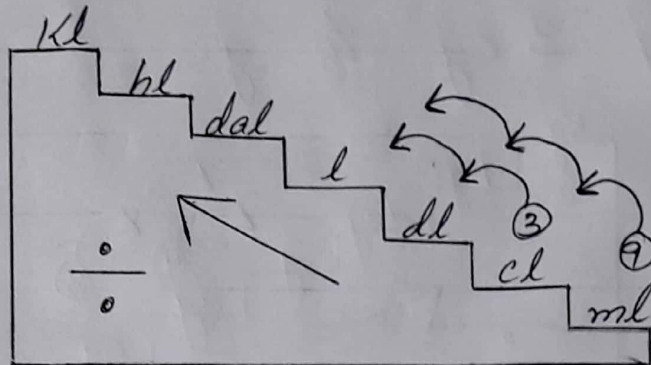
$$3cg = 0.03g$$

Add both, (4 dg = 0.4g) and (3 cg = 0.03g)

$$4dg + 3cg = 0.4 + 0.03$$

$$\therefore 4dg \ 3cg = 0.43g.$$

(i) 3cl 9ml to l.



From cl to l, there are 2 jumps
($\frac{1}{10} \times \frac{1}{10} = \frac{1}{100}$)

$$3cl = 3 \div 100$$

$$100 \overline{) 300} 0.03$$

$$\underline{300}$$

x

$$3cl = 0.03l$$

From 9ml to l, there are 3 jumps
($\frac{1}{10} \times \frac{1}{10} \times \frac{1}{10} = \frac{1}{1000}$)

$$9ml = 9 \div 1000$$

$$1000 \overline{) 9000} 0.009$$

$$\underline{9000}$$

x

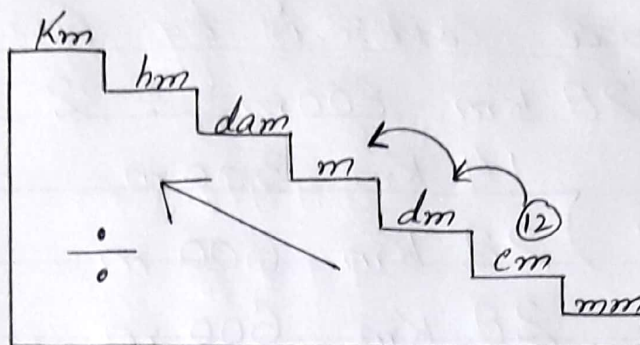
$$9ml = 0.009l$$

Add both, (3cl = 0.03l) and
(9ml = 0.009l)

$$3cl + 9ml = 0.03 + 0.009$$

$$\therefore 3 \text{ cl } 9 \text{ ml} = 0.039 \text{ l.}$$

(K) 5 m 12 cm to m.



There are no jumps from 5 m to m.
From cm to m, there are 2 jumps.
($\frac{1}{10} \times \frac{1}{10} = \frac{1}{100}$)

$$12 \text{ cm} = 12 \div 100$$

$$100 \overline{) 120} \quad 0.12$$

$$\underline{100}$$

$$200$$

$$\underline{200}$$

x

$$12 \text{ cm} = 0.12 \text{ m.}$$

Add both, (5 m) and (12 cm = 0.12 m)

$$5 \text{ m} + 12 \text{ cm} = 5 \text{ m} + 0.12$$

$$\therefore 5 \text{ m } 12 \text{ cm} = 5.12 \text{ m.}$$

Exercise :→ 68

Word problems.

(a) Question on book.

Sol. Grover rides his bicycle for = 2 hrs

Distance covered by Grover = 28 Km 600 m

$\therefore$ Distance covered by Grover in 1 hr

$$= 28 \text{ Km } 600 \text{ m} \div 2$$

$$\begin{array}{r} 14 \text{ Km } 300 \text{ m} \\ 2 \overline{) 28 \text{ Km } 600 \text{ m}} \\ \underline{28 \text{ Km } 600 \text{ m}} \end{array}$$

x

$$= 14 \text{ Km } 300 \text{ m}.$$

(b) Question on book.

Sol. Total no. of bottles given = 18

Each bottle can hold = 3 l 103 ml oil

$\therefore$ Oil needed to fill 18 bottles =

$$3 \text{ l } 103 \text{ ml} \times 18$$

$$24 \text{ l } 824 \text{ ml}$$

$$\underline{3 \text{ l } 103 \text{ ml} \times}$$

$$55 \text{ l } 854 \text{ ml}$$

$\therefore$ oil needed to fill 18 bottles = 55 l 854 ml

(c) Question on book.

Sol. Total cloth bought by Ajay's father = 4 m.

Cloth cutted for Arun = 1 m 25 cm.

Cloth cutted for himself = 2 m 15 cm.

$\therefore$ Total cloth cutted by Ajay's father =

$$\begin{array}{r}
 = 1\text{ m } 25\text{ cm} \\
 + 2\text{ m } 15\text{ cm} \\
 \hline
 3\text{ m } 40\text{ cm}
 \end{array}$$

$$\begin{array}{r}
 \therefore \text{Cloth received by Ajay's mother} = \\
 4\text{ m } 00\text{ cm} \\
 - 3\text{ m } 40\text{ cm} \\
 \hline
 60\text{ cm.}
 \end{array}$$

(d) Question on book.

Sol. Total no. of Rice varieties = 3

Weight of 1st Variety = 17 Kg 110 g

Weight of 2nd Variety = 31 Kg

Weight of 3rd Variety = + 22 Kg 68 g

$\therefore$ Total Weight of rice = 70 Kg 178 g

(e) Question on book.

Sol. Kangaroo's hop is about = 5 m.

Distance to be covered = 1 Km

$$1\text{ Km} = 1000\text{ m.}$$

$\therefore$ No. of hops a Kangaroo takes to cover a distance of 1000 m =

$$1000 \div 5$$

$$5 \overline{)1000} \mid 200$$

$$\underline{10}$$

x

= 200 hops.

(4) Question on book.

Sol. Sam walks per day = 4.8 Km.

$\therefore$ Sam walks in 30 days =

$$\begin{array}{r} 4.8 \times 30 \\ 00 \\ 144 \times \\ \hline 144.0 \end{array}$$

$\therefore$ In 30 days Sam walks = 144 Km.

Q. 1: $\rightarrow$ Define Perimeter.

Ans: The total distance of the boundary in a closed figure is called its Perimeter.

Formula: $\rightarrow$

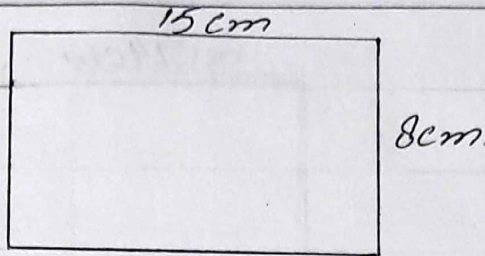
① Perimeter of a rectangle = $2 \times \text{length} + 2 \times \text{breadth}$.
 $= 2(\text{length} + \text{Breadth})$
 $\therefore P = 2[L + B]$.

② Perimeter of a Square = $2(L + L)$
 $= 2 \times 2L$
 $\therefore P = 4L$.

Exercise: $\rightarrow$ 69

1: Find the perimeter with the help of the formula.

(a)

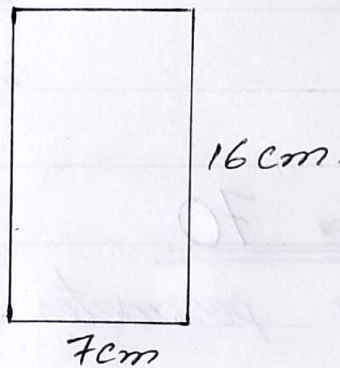


Length = 15 cm.

Breadth = 8 cm.

$$\begin{aligned}
 \text{Perimeter of a rectangle} &= 2[L+B] \\
 &= 2[15+8] \\
 &= 2 \times 23 \\
 &= 46 \text{ cm.}
 \end{aligned}$$

(b)

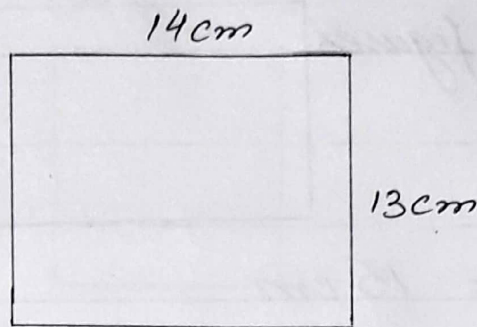


Length = 16 cm.

Breadth = 7 cm.

$$\begin{aligned}
 \text{Perimeter of a rectangle} &= 2[L+B] \\
 &= 2[16+7] \\
 &= 2 \times 23 \\
 &= 46 \text{ cm.}
 \end{aligned}$$

(C)



$$\text{Length} = 14 \text{ cm}$$

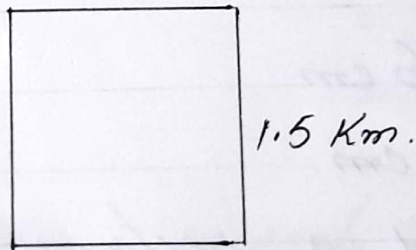
$$\text{Breadth} = 13 \text{ cm}$$

$$\begin{aligned} \text{Perimeter of a rectangle} &= 2 [L + B] \\ &= 2 [14 + 13] \\ &= 2 \times 27 \\ &= 54 \text{ cm.} \end{aligned}$$

Exercise $\rightarrow$ 70

1: Find the perimeter of each square.

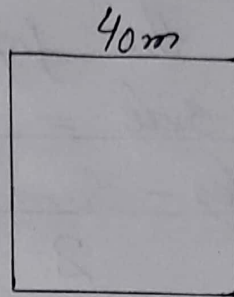
(a)



$$\text{Length} = 1.5 \text{ Km.}$$

$$\begin{aligned} \text{Perimeter of a square} &= 4L \\ &= 4 \times 1.5 \\ &= 6.0 \text{ Km.} \end{aligned}$$

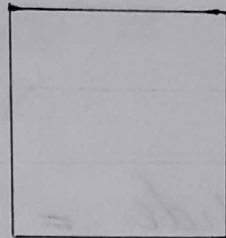
(b)



$$\text{Length} = 40 \text{ m}$$

$$\begin{aligned} \text{Perimeter of a square} &= 4L \\ &= 4 \times 40 \\ &= 160 \text{ m.} \end{aligned}$$

(c)



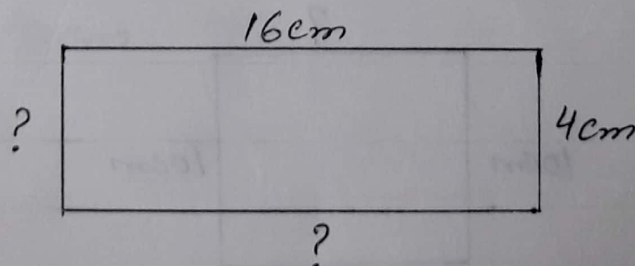
1 Km

$$\text{Length} = 1 \text{ Km}$$

$$\begin{aligned} \text{Perimeter of a square} &= 4L \\ &= 4 \times 1 \\ &= 4 \text{ Km.} \end{aligned}$$

2: The Perimeter of each figure is 40 cm. Find the length of the missing sides.

(a)



Sol. Perimeter of the figure = 40 cm.

length of 1st side =

$$\frac{\text{Perimeter} - \text{Sum of opp. sides}}{2}$$

$$= \frac{40 - [16 + 16]}{2}$$

$$= \frac{40 - 32}{2}$$

$$= \frac{8}{2}$$

$$= 4$$

~~2~~

$$= 4 \text{ cm.}$$

length of 2nd side =

$$\frac{\text{Perimeter} - \text{Sum of opp. sides}}{2}$$

$$= \frac{40 - [4 + 4]}{2}$$

$$= \frac{40 - 8}{2}$$

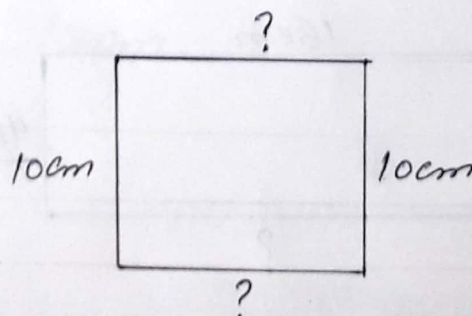
$$= \frac{32}{2}$$

$$= 16$$

~~2~~

$$= 16 \text{ cm.}$$

(b)



$$\text{Perimeter} = 40 \text{ cm.}$$

$$\text{Length of 1st side} =$$

$$\frac{\text{Perimeter} - \text{Sum of opp. side}}{2}$$

$$= \frac{40 - [10 + 10]}{2}$$

$$= \frac{40 - 20}{2}$$

$$= \frac{20}{2}$$

$$= 10 \text{ cm.}$$

$$\text{Length of 2nd side} =$$

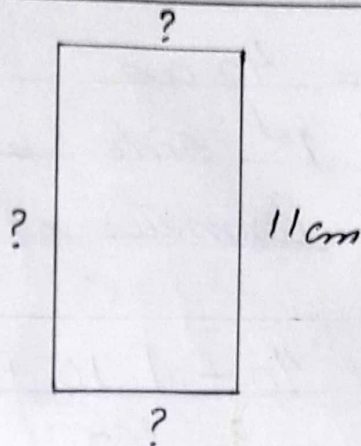
$$\frac{\text{Perimeter} - \text{Sum of opp. side}}{2}$$

$$= \frac{40 - [10 + 10]}{2}$$

$$= \frac{40 - 20}{2}$$

$$= \frac{20}{2}$$

$$= 10 \text{ cm.}$$



$$\text{Perimeter} = 40 \text{ cm}$$

$$\text{Length of 1st side} =$$

$$\frac{\text{Perimeter} - \text{Sum of opp. sides}}{2}$$

$$= \frac{40 - [11 + 11]}{2}$$

$$= \frac{40 - 22}{2}$$

$$= \frac{18}{2}$$

$$= 9 \text{ cm}$$

$$\text{Length of 2nd side} =$$

$$\frac{\text{Perimeter} - \text{Sum of opp. side}}{2}$$

$$= \frac{40 - [9 + 9]}{2}$$

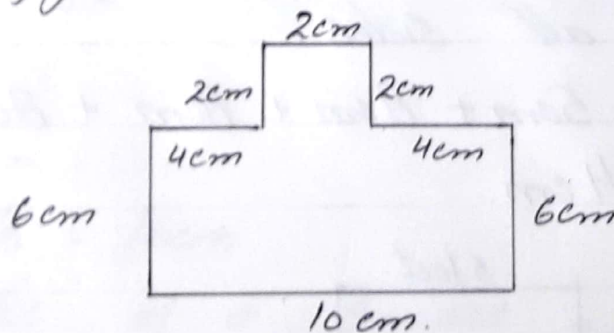
$$= \frac{40 - 18}{2}$$

$$\begin{aligned}
 &= \frac{22 \times 11}{2} \\
 &= 11 \text{ cm.} \\
 \text{length of 3rd side} &= \frac{\text{Perimeter} - \text{Sum of opp. side}}{2} \\
 &= \frac{40 - [11 + 11]}{2} \\
 &= \frac{40 - 22}{2} \\
 &= \frac{18}{2} \\
 &= 9 \text{ cm.}
 \end{aligned}$$

Exercise :→ 71

1: Find the perimeter of the following closed figures: [Practice remaining parts yourself]

(a)

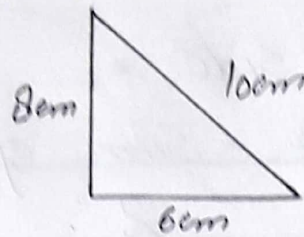


Sol. Perimeter of the closed figure =
Sum of all sides.

$$= 2 \text{ cm} + 2 \text{ cm} + 2 \text{ cm} + 4 \text{ cm} + 6 \text{ cm} + 10 \text{ cm} +$$

$$6\text{ cm} + 4\text{ cm} \\ = 10\text{ cm}.$$

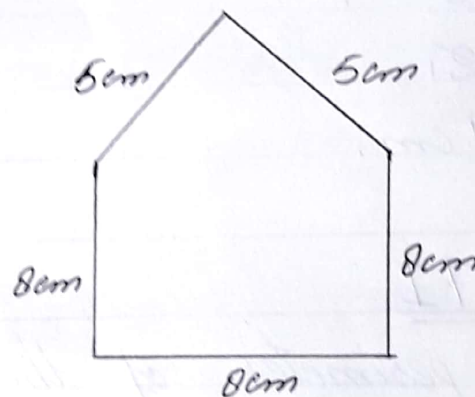
(c)



sol Perimeter of the closed figure =
Sum of all sides.

$$= 10\text{ cm} + 6\text{ cm} + 8\text{ cm} \\ = 24\text{ cm}$$

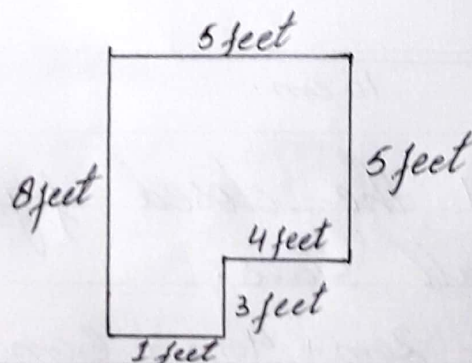
(e)



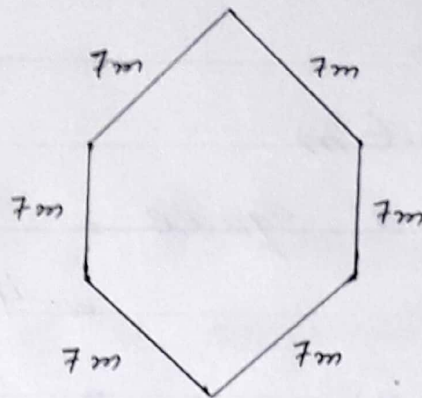
sol. Perimeter of the closed figure =
Sum of all sides.

$$= 5\text{ cm} + 5\text{ cm} + 8\text{ cm} + 8\text{ cm} + 8\text{ cm} \\ = 34\text{ cm}.$$

(g)



(i)



sol. Perimeter of the closed figure =
Sum of all sides.

$$= 7m + 7m + 7m + 7m + 7m + 7m$$

$$= 42m.$$

2: Find the perimeters of the squares
Whose sides are given below.

(a) 24m

length = 24m

$$\text{Perimeter of a square} = 4L$$

$$= 4 \times 24$$

$$= 96m.$$

(b) 16cm

length = 16cm.

$$\text{Perimeter of a square} = 4L$$

$$= 4 \times 16$$

$$= 64cm.$$

(c) 3.6 m.

Length = 3.6 m.

$$\begin{aligned}\text{Perimeter of a square} &= 4L \\ &= 4 \times 3.6 \\ &= 14.4 \text{ m.}\end{aligned}$$

(d) 51 m

Length = 51 m.

$$\begin{aligned}\text{Perimeter of a square} &= 4L \\ &= 4 \times 51 \\ &= 204 \text{ m.}\end{aligned}$$

3: Find the perimeters of the rectangles whose length (L) and breadth (b) are given below: [Practice remaining parts yourself]

(a) $L = 3.2 \text{ cm}$, $b = 7.2 \text{ cm}$.

$$\begin{aligned}\text{Perimeter of a rectangle} &= 2[L+b] \\ &= 2[3.2+7.2] \\ &= 2 \times 10.4 \\ &= 20.8 \text{ cm.}\end{aligned}$$

$L = 9.8 \text{ m}$, $b = 35 \text{ m}$.

$$\begin{aligned}\text{Perimeter of a rectangle} &= 2[L+b] \\ &= 2[9.8+35]\end{aligned}$$

$$= 2 \times 44.8$$

$$= 89.6 \text{ m.}$$

(c) $l = 12 \text{ m}$, $b = 14.5 \text{ m}$.

$$\text{Perimeter of a rectangle} = 2[l+b]$$

$$= 2[12+14.5]$$

$$= 2 \times 26.5$$

$$= 53.0 \text{ m.}$$

4: Question on book.

sol. Length of a square field = 506 m.

$$\text{Perimeter of a square} = 4l$$

$$= 4[506]$$

$$= 4 \times 506$$

$$= 2024 \text{ m.}$$

$$1 \text{ Km} = 1000 \text{ m.}$$

$\therefore$ Perimeter of the field = $2024 \div 1000$

$$1000 \overline{) 2024} \mid 2.024$$

$$\underline{2000}$$

$$2400$$

$$\underline{2000}$$

$$4000$$

$$\underline{4000}$$

X

$$= 2.024 \text{ Km.}$$

5: Question on book

Sol. Length of the square field = 404 m

$$\begin{aligned}\text{Perimeter of the square field} &= 4L \\ &= 4 \times 404 \\ &= 1616 \text{ m.}\end{aligned}$$

$$1 \text{ m} = 100 \text{ cm.}$$

$$\therefore \text{Perimeter of the field} = 1616 \times 100$$

$$\begin{array}{r} 0000 \\ 0000 \times \\ 1616 \times \times \\ \hline 161600 \text{ cm.} \end{array}$$

6: Question on book

Sol. Length of the rectangular field = 640 m

Breadth of the rectangular field = 260 m.

Perimeter of the rectangular field = $2[L+B]$

$$= 2[640 + 260]$$

$$= 2[900]$$

$$= 2 \times 900$$

$$= 1800 \text{ m}$$

$$1 \text{ Km} = 1000 \text{ m.}$$

$$\therefore \text{Perimeter of the field} = 1800 \div 1000$$

$$1000 \overline{)1800} 1.8$$

$$\begin{array}{r} 1000 \\ 8000 \\ 8000 \\ \hline \end{array}$$

X

$$= 1.8 \text{ Km.}$$

Q: Define Area.

sol. Area is the amount of the surface that a particular figure covers up.

Formula:

① Area of a Square = Side $\times$ Side
Area = $S \times S$.

② Area of a rectangle = Length $\times$ Breadth.
Area = $L \times B$

Exercise: $\rightarrow$ 78

1: Use the formula to find the area.
Write the name of the geometrical shapes.

	Length (L)	Breadth (B)	Area	Shape
(b)	8m	8m	<u>$64m^2$</u>	<u>Square</u>

$$\begin{aligned} \text{Area} &= S \times S \\ &= 8 \times 8 \\ &= 64m^2 \end{aligned}$$

(c)	9cm	7cm	<u>$63cm^2$</u>	<u>rectangle</u>
-----	-----	-----	----------------------------	------------------

$$\begin{aligned} \text{Area} &= L \times B \\ &= 9 \times 7 \\ &= 63cm^2 \end{aligned}$$

(d)	2.5 m	2.5 m	<u>$6.25m^2$</u>	<u>Square</u>
-----	-------	-------	-----------------------------	---------------

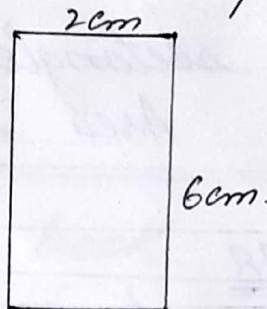
$$\begin{aligned} \text{Area} &= S \times S \\ &= 2.5 \times 2.5 \\ &= 6.25m^2 \end{aligned}$$

(e) 1cm 100cm 100 cm² rectangle

$$\begin{aligned} \text{Area} &= L \times B \\ &= 1 \times 100 \\ &= 100 \text{ cm}^2 \end{aligned}$$

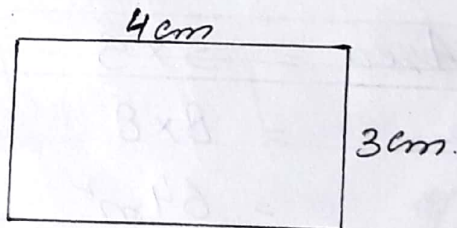
2: Find area with the help of the formula.

(a)



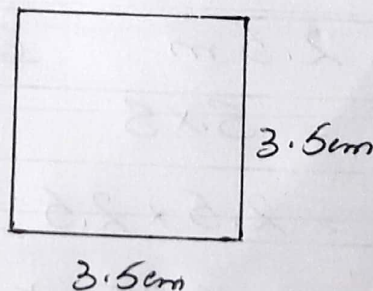
$$\begin{aligned} \text{Area of a rectangle} &= L \times B \\ &= 2 \times 6 \\ &= 12 \text{ cm}^2 \end{aligned}$$

(b)



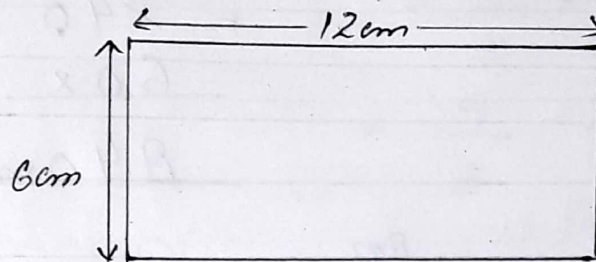
$$\begin{aligned} \text{Area of a rectangle} &= L \times B \\ &= 4 \text{ cm} \times 3 \text{ cm} \\ &= 12 \text{ cm}^2 \end{aligned}$$

(c)



$$\begin{aligned}
 \text{Area of a Square} &= S \times S \\
 &= 3.5 \times 3.5 \\
 &\quad 175 \\
 &\quad \underline{105 \times} \\
 &\quad \underline{12.25 \text{ cm}^2}
 \end{aligned}$$

3:



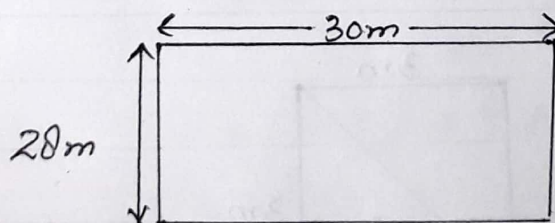
Q: Question on book.

sol. Area of each square = $2\text{cm} \times 2\text{cm}$
 $= 4\text{cm}^2$

Area of the paper sheet = 12×6
 $= 72\text{cm}^2$

$\therefore$ No. of square that can be drawn on the sheet of paper = $\frac{\text{Area of paper sheet}}{\text{Area of each square}}$
 $= \frac{72}{4} = 18$

4:



Question on book.

Sol. Length of the land = 30m

Breadth of the land = 28m.

$\therefore$ Area of the land = $L \times B$

$$= 30 \times 28$$

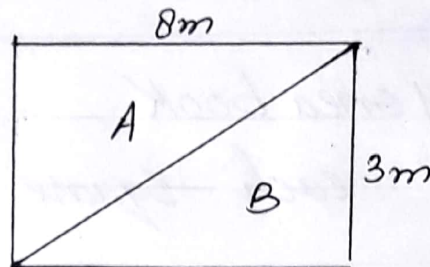
$$= 240$$

$$\underline{60 \times}$$

$$\underline{840 \text{ m}^2}$$

5:

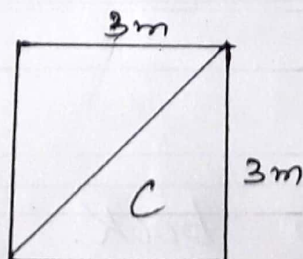
(a)



$$\begin{aligned} \text{Area of the rectangle} &= L \times B \\ &= 8 \times 3 \\ &= 24 \text{ m}^2 \end{aligned}$$

$$\begin{aligned} \text{Area of the triangle A} &= \frac{1}{2} \times L \times B \\ &= \frac{1}{2} \times 8 \times 3 \\ &= \frac{1}{2} \times 24 \\ &= 12 \text{ m}^2. \end{aligned}$$

(b)

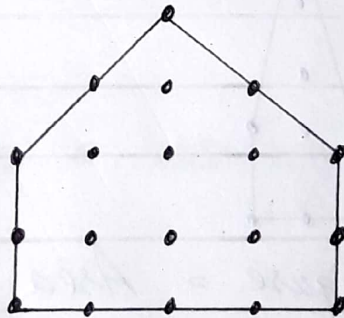


$$\begin{aligned}
 \text{Area of a Square} &= 3 \times 3 \\
 &= 3 \times 3 \\
 &= 9\text{m}^2
 \end{aligned}$$

$$\begin{aligned}
 \text{Area of a triangle} &= \frac{1}{2} \times 3 \times 3 \\
 &= \frac{1}{2} \times 9 \\
 &= \frac{9}{2} = 9 \div 2 \\
 &= 2 \overline{)9} 4.5 \\
 &\quad \underline{8} \\
 &\quad 10 \\
 &\quad \underline{10} \\
 &\quad \times \\
 &= 4.5\text{m}^2.
 \end{aligned}$$

Exercise : $\rightarrow$ 79

1: Find the area of combined figures.

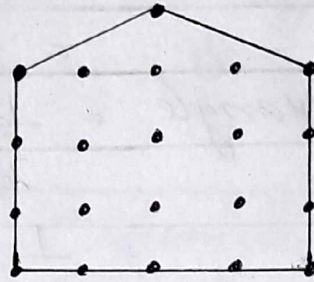


$$\begin{aligned}
 \text{sol. Area of figure} &= \text{Area of triangle} + \text{Area of rectangle.} \\
 &= \frac{1}{2} \times 4 \times 2 + 4 \times 2 \\
 &= \frac{1}{2} \times 8 + 8 \\
 &= 4 + 8 \\
 &= 12
 \end{aligned}$$

$$= 4 + 8$$

$$= 12 \text{ cm}^2$$

(c)



Area of the figure = Area of triangle +
Area of rectangle.

$$= \frac{1}{2} \times 4 \times 1 + 3 \times 4$$

$$= \frac{1}{2} \times 4 + 12$$

$$= 2 + 12$$

$$= 14 \text{ cm}^2$$

(e)



Area of the figure = Area of triangle +
Area of rectangle.

$$= \frac{1}{2} \times 2 \times 3 + 1 \times 2$$

$$= \frac{1}{2} \times 6 + 2$$

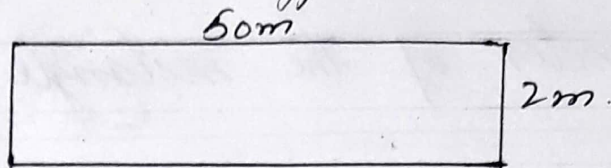
$$= 3 + 2$$

$$= 5 \text{ cm}^2$$

Exercise: → 80

1: Each of rectangles shown below has the same area but different perimeters.

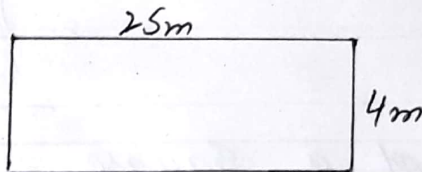
(a)



$$\begin{aligned}\text{Area of a rectangle} &= L \times B \\ &= 50 \times 2 \\ &= 100\text{m}^2.\end{aligned}$$

$$\begin{aligned}\text{Perimeter of a rectangle} &= 2[L+B] \\ &= 2[50+2] \\ &= 2 \times 52 \\ &= 104\text{m}.\end{aligned}$$

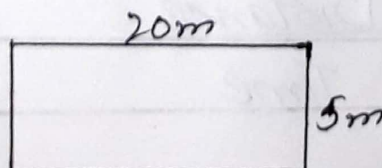
(b)



$$\begin{aligned}\text{Area of a rectangle} &= L \times B \\ &= 25 \times 4 \\ &= 100\text{m}^2\end{aligned}$$

$$\begin{aligned}\text{Perimeter of a rectangle} &= 2[L+B] \\ &= 2[25+4] \\ &= 2 \times 29 \\ &= 58\text{m}\end{aligned}$$

(c)

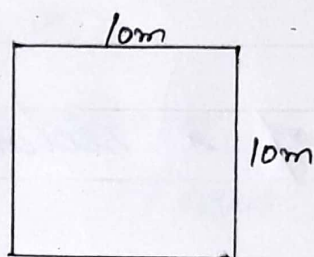


$$\begin{aligned}\text{Area of the rectangle} &= L \times B \\ &= 20 \times 5\end{aligned}$$

$$= 100 \text{ m}^2$$

$$\begin{aligned}\text{Perimeter of the rectangle} &= 2[L+B] \\ &= 2[20+5] \\ &= 2 \times 25 \\ &= 50 \text{ m.}\end{aligned}$$

(d)



$$\begin{aligned}\text{Area of a Square} &= S \times S \\ &= 10 \times 10 \\ &= 100 \text{ m}^2\end{aligned}$$

$$\begin{aligned}\text{Perimeter of a Square} &= 4L \\ &= 4 \times 10 \\ &= 40 \text{ m.}\end{aligned}$$

1(b): Which figure has the most area but the least perimeter? D

Exercise $\Rightarrow$ 81

Formula:

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

$$\therefore S = \frac{D}{T}$$

1: Find the Speed

Distance (D) Time (T) Speed (S)

(a) 120 Km 4 hours 30 Km/hr

$$S = \frac{D}{T}$$

$$= \frac{120}{4} = 30$$

$$= 30 \text{ Km/hr}$$

(b) 510 Km 17 hours 30 Km/hr

$$S = \frac{D}{T}$$

$$= \frac{510}{17} = 30$$

$$= 30 \text{ Km/hr}$$

(c) 478 Km 10 hours 47.8 Km/hr

$$S = \frac{D}{T}$$

$$= \frac{478}{10} = 47.8$$

$$\begin{array}{r} 40 \\ 78 \\ 70 \\ 80 \\ 80 \\ \hline \end{array}$$

X

(d) 121 Km 11 hours 11 Km/hr

$$S = \frac{D}{T}$$

$$= \frac{121}{11}$$

(e) 786 Km 30 hours 26.2 Km/hr

$$S = \frac{D}{T}$$

$$= \frac{786}{30} = 30 \overline{) 786} \quad 26.2$$

$$\begin{array}{r} 60 \\ 186 \\ 180 \\ \hline 60 \\ 60 \\ \hline 0 \end{array}$$

(f) 448 Km 4 hours 112 Km/hr

$$S = \frac{D}{T}$$

$$= \frac{448}{4}$$

$$= 112 \text{ Km/hr}$$