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NEW ERA PUBLIC SCHOOL RAJBAGH SRINAGAR

SUBJECT :- MATH :- A/B

CLASS :- 6TH

MATH :- A

UNIT :- 3RD

CHAPTER :- 08 [DECIMALS]

SOLVED ASSIGNMENT OF UNIT 3RD [2021]

Exercise 8.1

Q=1 Write the following shaded part in the decimal form:
Solution [figure on book] Shaded part in the decimal form

$$= 1 + 1 + \frac{3}{10} = 2 + \frac{3}{10} = 2.3$$

Q=2 Place the following decimals in a place value Table with columns of hundreds, tens, ones and tenths.

	Hundreds	Tens	ones	Tenths
(a) 2.9			2	9
(b) 10.7		1	0	7
(c) 231.6	2	3	1	6

Q=3 Write each of the following as decimals:

(a) 3 tenths = 0.3 (b) 4 tenths = 0.4 (c) 2 tens & 5 tenths = 20.5

Q=4 Write each of the following as decimals

$$(a) \frac{4}{10} = 0.4 \quad (c) 7\frac{2}{5} = \frac{37}{5} = \frac{37 \times 2}{5 \times 2} = \frac{74}{10} = 7.4$$

Q=5 Do your self

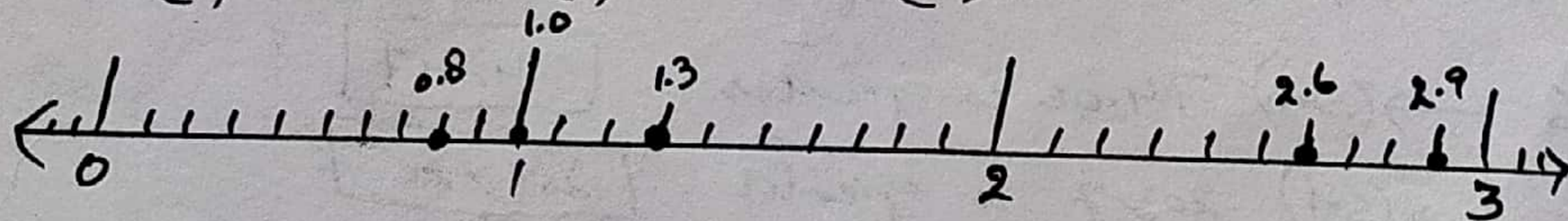
Q=6 Write the decimals represented by the points A, B, C and D marked on the number line:

Solution Number line on Book. [A → 0.3, B → 1.3, C → 1.8, D → 2.4]

Q=7 Show the following decimals on a number line:

(a) 0.8 (b) 1.0 (c) 1.3 (d) 2.6 (e) 2.9

Solution



Q=8 Do your self

Q=9 Express the following lengths in cm:

(a) 7cm 5mm ⇒ 7.5cm (c) 2cm 7mm ⇒ 2.7cm

P.T.O

Q=10 Do your self $\approx \circ \approx$

Exercise 8.2

Q=1 Write each of the following in the decimal form:

(a) $4 + \frac{7}{10} + \frac{6}{100} \rightarrow 4 + 0.7 + 0.06 = 4.76$

(d) $70 + 6 + \frac{7}{100} + \frac{2}{1000} \rightarrow 76 + 0.07 + 0.002 = 76.072$

Q=2 Do your self

Q=3 Write the place value of 5 in each of the following decimals

(a) 71.057 $\rightarrow$ Place value of 5 is 5 hundredths

(d) 13.075 $\rightarrow$ Place value of 5 is 5 thousandths

Q=4 Write each of the following decimal as a fraction in the simplest form:

(a) $13.7 = \frac{137}{10} = 13\frac{7}{10}$ Q $\frac{R}{D}$

(b) $42.04 = \frac{4204}{100} = \frac{2102}{50} = \frac{1051}{25} = 42\frac{1}{25}$ Q $\frac{R}{D}$

Q=5 Write each of the following decimals in words:

(a) 3.5 $\rightarrow$ Three point five (c) 10.012 $\rightarrow$ Ten point zero one two

Q=6 Write the following decimals in a place value table:

(a) 5.2 (c) 41.14 (e) 71.66 (g) 4.243

Solution

	Tens	ones	Tenths	Hundredths	Thousandths
(a)		5	2		
(c)	4	1	1	4	
(e)	7	1	6	6	
(g)		4	2	4	3

$\approx \circ \approx$

Exercise 8.3

Q=1 Which one is greater decimal in the following pairs?

(a) 8.34, 19.4 $\rightarrow$ (sol.) 19.4 is greater $\boxed{19 > 8}$

(c) 74.06, 47.6 $\rightarrow$ (sol.) 74.06 is greater $\boxed{74 > 47}$

(e) 203.7, 20.37 $\rightarrow$ (sol.) 203.7 is greater $\boxed{203 > 20}$

(g) 84.37, 37.84 $\rightarrow$ (sol.) 84.37 is greater $\boxed{84 > 37}$

(i) 14.08, 1.637 $\rightarrow$ (sol.) 14.08 is greater $\boxed{14 > 1}$

Q=2 Write $>$, $<$ or $=$ in $\square$

(a) $6.07 \square 6.7$ $\square 0.07 < 0.7$ (c) $21.40 \square 21.04$ $\square 0.40 > 0.04$

(e) $35.6 \square 35.60$ $\square 0.6 = 0.60$ (f) $0.72 \square 7.2$ $\square 0 < 7$

Q=3 Express as rupees using decimals:

(a) 4 paise = Rs $\frac{4}{100}$ = Rs 0.04 (d) Rs 2 p 20 = Rs 2 + Rs $\frac{20}{100}$ = Rs 2.20

Q=4 Express as cm using decimals:

(a) 2mm = $\frac{2}{10}$ cm = 0.2 cm (e) 2cm 3mm = 2cm + $\frac{3}{10}$ cm = 2.3 cm

Q=5 Express as m using decimals:

(a) 17cm = $\frac{17}{100}$ m = 0.17 m (e) 2137cm = $\frac{2137}{100}$ m = 21.37 m

Q=6 Express as Km using decimals:

(a) 2370m = $\frac{2370}{1000}$ Km = 2.370 Km (d) 450m = $\frac{450}{1000}$ Km = 0.450 Km

Q=7 Express as Kg using decimals:

(a) 13g = $\frac{13}{1000}$ Kg = 0.013 Kg (f) 2Kg 350g = 2Kg + $\frac{350}{1000}$ Kg = 2.350 Kg

Q=8 Do your self

Q=9 Write each of the following without decimals:

(a) Rs 10.37 = 10 rupees 37 paise (e) 17.015 Km = 17 Km 15 m

Q=10 Do your self.

Exercise 8.4

Q=1 Convert each of the following into groups of like decimals

(a) 2.35, 2.3, 2.035, 12.05

(c) 382.07, 83.820, 23.7, 80.27

(sol.) 2.350, 2.300, 2.035, 12.050

(sol.) 382.070, 83.820, 23.700, 80.270

Q=2 Arrange the following decimals in ascending order

(a) 14.2, 53.45, 14.7, 1.127

(c) 12.58, 2.158, 212.5, 1.638

(sol.) 1.127, 14.2, 14.7, 53.45

(sol.) 1.638, 2.158, 12.58, 212.5

Q=3 Arrange the following decimals in descending order:

(a) 21.6, 21.590, 21.71, 21.8

(c) 1.235, 5.23, 3.125, 521.3

(sol.) 21.80, 21.71, 21.6, 21.590

(sol.) 521.3, 5.23, 3.125, 1.235

Exercise 8.5

Q=1 Add (a) 5.21 and 0.15

(c) 41.03, 7.562 and 9.7

(sol.) (a)
$$\begin{array}{r} 5.21 \\ + 0.15 \\ \hline 5.36 \end{array}$$

(sol.)
$$\begin{array}{r} 41.030 \\ 7.562 \\ + 9.700 \\ \hline 58.292 \end{array}$$

Q=2 Subtract (a) 5.13 from 7.78 (d) 9.163 from 15

Solution (a)
$$\begin{array}{r} 7.78 \\ - 5.13 \\ \hline 2.65 \end{array}$$

(sol)(d)
$$\begin{array}{r} 15.000 \\ - 9.163 \\ \hline 5.837 \end{array}$$

Q=3 Simplify (a) $5.18 - 1.2 + 3.225$ (c) $2.58 - 1.3 + 3.475$

(Sol)(a)
$$\begin{array}{r} 5.18 \\ - 1.20 \\ \hline 3.98 \end{array} \rightarrow \begin{array}{r} 3.980 \\ + 3.225 \\ \hline 7.205 \end{array}$$

(Sol)(c)
$$\begin{array}{r} 2.58 \\ - 1.30 \\ \hline 1.28 \end{array} \rightarrow \begin{array}{r} 1.280 \\ + 3.475 \\ \hline 4.755 \end{array}$$

Q24 The sum of two numbers is 19.6. If one of them is 7.036. Find the other number.

Solution Other number = Sum of two numbers - One number
 other number = $19.6 - 7.036$
 other number = 12.564

Q25 Do your self.

Q26 Sheela bought 2m 35cm dress material for her brother and 4m 75cm for herself. How much dress material did she buy?

Solution Dress material for brother $\rightarrow 2\text{ m } 35\text{ cm}$
 Dress material for herself $\rightarrow + 4\text{ m } 75\text{ cm}$
 Total dress material $\rightarrow \begin{array}{r} 2\text{ m } 35\text{ cm} \\ + 4\text{ m } 75\text{ cm} \\ \hline 7\text{ m } 10\text{ cm} \end{array}$

Q27 Do your self Q28 Do your self

Q29 Tina walked 8km 50m on Monday and 7km 150m on Tuesday. How much distance did she walk in two days?

Solution Tina walked on Monday $\rightarrow 8\text{ km } 050\text{ m}$
 Tina walked on Tuesday $\rightarrow + 7\text{ km } 150\text{ m}$
 Total distance walked $\rightarrow \begin{array}{r} 8\text{ km } 050\text{ m} \\ + 7\text{ km } 150\text{ m} \\ \hline 15\text{ km } 200\text{ m} \end{array}$

Q210 Do your self Q211 Do your self Q212 Do your self

Q213 A vessel weighed 16kg 370g. After it was melted, it weighed 12kg 50g. How much metal was lost by melting?

Solution A vessels weight $\rightarrow 16\text{ kg } 370\text{ g}$
 After melting its weight $\rightarrow - 12\text{ kg } 050\text{ g}$
 Metal lost $\rightarrow \begin{array}{r} 16\text{ kg } 370\text{ g} \\ - 12\text{ kg } 050\text{ g} \\ \hline 4\text{ kg } 320\text{ g} \end{array}$

Q214 Do your self Q215 Do your self

Q216 Kanchan bought a watermelon weighing 5kg 200g. Out of this, she gave 2kg 50g to her neighbour. How much of the water melon is left with Kanchan?

Solut. weight of water melon $\rightarrow 5\text{ kg } 200\text{ g}$
 gave to neighbour $\rightarrow - 2\text{ kg } 050\text{ g}$
 watermelon left $\rightarrow \begin{array}{r} 5\text{ kg } 200\text{ g} \\ - 2\text{ kg } 050\text{ g} \\ \hline 3\text{ kg } 150\text{ g} \end{array}$

Q=17 Do your self

Q=18 Kajendra has monthly Income is Rs 4552. He spends Rs 750 on house rent and Rs 1235.70 on house hold expenditures. How much does he save?

Solution Monthly Income = Rs 4552
Spends money for house rent and house hold expenditure
 $= (Rs 750 + Rs 1235.70) = Rs 1985.70$

So saving = Rs 4552 - Rs 1985.70 = Rs 2566.30

Q=19 Do your self

Q=20 Ahmad purchased 15kg 500g rice, 25kg 750g flour and 3kg 250g sugar. Find the total weight of his purchase. Is it 50kg or less? If less, how much less?

Solution

Rice purchased	15 Kg 500 g
Flour purchased	25 Kg 750 g
Sugar purchased	+ 3 kg 250 g
Total weight	= <u>44 kg 500 g</u>

clearly it is less than 50kg. $\rightarrow$

50 Kg 000 g
- 44 Kg 500 g
<u>5 Kg 500 g</u>

It is 5kg 500g less than 50kg.

Q=21 Do your self

Q=22 Do your self ~~~

[NOTE:- REST OF THE PARTS DO YOUR SELF]

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# CHAPTER 1-11 [ALGEBRA] MATHA

## Exercise 11.1

Q=1 Write the rule which gives succeeding numbers of each of the following number series:

- (a) 1, 2, 4, 8, 16, ----  $\rightarrow$  (Sol.) Double the previous number  
 (c) 40, 30, 20, 10, ----  $\rightarrow$  (Sol.) Subtract 10 from the previous number  
 (d) 6, 12, 18, 24, 30, ----  $\rightarrow$  (Sol.) Add 6 to the previous number.

Q=2 Find the rule which represents the number of triangles formed and the number of matchsticks used in the following diagram.

(a) diagram on Book

(Sol.) No. of match sticks required  
 $= 2 \times \text{no. of Triangles} + 1$   
 $= 2 \times 1 + 1 = 2 + 1 = 3$

(c) diagram on Book

(Solution) No. of matchsticks required  
 $= 2 \times \text{no. of Triangles} + 1$   
 $= 2 \times 3 + 1 = 6 + 1 = 7$

Q=3 Find the rule which represents the number of hexagons formed and the number of matchsticks used in the following diagram:

(a) diagram on Book

Solution: No. of matchsticks required  
 $= 5 \times \text{no. of hexagons} + 1$   
 $= 5 \times 1 + 1 = 5 + 1 = 6$

(c) diagram on Book

(Solution) No. of match sticks required  
 $= 5 \times \text{no. of hexagons} + 1$   
 $= 5 \times 3 + 1 = 15 + 1 = 16$

Q=4 Find a rule which connects the two quantities in each of the following Tables:-

(a) Table on Book

(Sol.)  $b = 2a - 1 \rightarrow b = 2(1) - 1 \rightarrow b = 2 - 1 \rightarrow b = 1$   
 $b = 2a - 1 \rightarrow b = 2(2) - 1 \rightarrow b = 4 - 1 \rightarrow b = 3$   
 $b = 2a - 1 \rightarrow b = 2(3) - 1 \rightarrow b = 6 - 1 \rightarrow b = 5$   
 $b = 2a - 1 \rightarrow b = 2(4) - 1 \rightarrow b = 8 - 1 \rightarrow b = 7$

(b) Table on Book

Solution  
 $y = 3x + 2$   
 Do your self.

Q=5 The cost of a pen is Rs 25. write the rule which gives the cost of n number of pens.

Solution Cost of a pen = Rs 25  $\rightarrow$  so cost of n pens = Rs 25n

Q=6 Do your self.

Q=7 A bird flies 1 km in one minute. what distance will the bird cover in t minutes?

Solution The bird flies in one minute = 1 km  
 $\therefore$  The bird flies in t minutes = t km  
 ~ o ~



Exercise 11.2

Q=1 Write the algebraic expression for each of the following:

(a) a times b =  $ab$  (c) 2 more than thrice of  $y = 3y + 2$  (e)  $y$  minus  $2x = y - 2x$

Q=2 Write the algebraic expression for each of the following:

(a) Three times  $y$  decreased by 4 gives 20  $\rightarrow 3y - 4 = 20$

(c)  $z$  is greater than  $y$  by 12  $\rightarrow$  Do your self

(d) The radius  $r$  of a circle is half the diameter  $d$ .  $\rightarrow r = d/2$

Q=3 Answer each of the following

(a) In a class of 42 students  $x$  are boys. How many girls are there in the class?

Solution Total students = 42, No. of boys =  $x$

So, the no. of girls in the class ( $y$ )  $\rightarrow y = 42 - x$

(d) In a 2-digit number, the digit at ones place is  $x$  and at tens place is  $y$ , what is this number?

Solution In the 2-digit number, Digit at ones place =  $x$ , Digit at tens place =  $y$

So, the number is  $10y + x = 10y + x$ .

Q=4 Change the following statements using expression into statements in ordinary language.

(a) Rupas age is  $x$  years. The age of her father is  $(2x + 3)$  years.

(Sol.) Father's age is 3 years more than twice the age of his daughter Rupa.

Exercise 11.3

Q=1 Which of the following are equations?

(a)  $x - 20 = 7$  (b)  $p + 7 > 5$  (c)  $\frac{q}{2} + 1 = 7$  (d)  $25 = 10$  (e)  $\frac{y}{8} > 10$  (f)  $17 - 4 \times 2 = 9$

Solution (a), (c) and (d) are equations

Q=2 Identify the variable in each of the following equations

(a)  $3p - 1 = 10$  (b)  $1 + 3r = 7$  (c)  $n - 4 = 20$  (d)  $\frac{q}{2} = 40$  (e)  $3mt = 6$  (f)  $17 - p = 9$

(Sol.) (a)  $p$  (b)  $r$  (c)  $n$  (d)  $q$  (e)  $m$  (f)  $p$

Q=3 Write the solution of the equations

(a)  $b + 5 = 9 \rightarrow b = 9 - 5 \rightarrow b = 4$  [4 is the solution of the equation]

(c)  $p + 7 = 7 \rightarrow p = 7 - 7 \rightarrow p = 0$  [0 is the solution of the equation]

(e)  $3p - 1 = 2 \rightarrow 3p = 2 + 1 \rightarrow 3p = 3 \rightarrow p = \frac{3}{3} \rightarrow p = 1$  [1 is the solution of the equation]

Q=4 Pick out the solution from the values given within brackets:

(a)  $x - 4 = 0 \rightarrow 4 - 4 = 0 \therefore$  [4 is the solution] (4, -4, 8, 0)

(b)  $x + 4 = 12 \rightarrow 8 + 4 = 12 \therefore$  [8 is the solution] (-2, 0, 2, 8)

(c)  $2m - 1 = 7 \rightarrow 2 \times 4 - 1 = 7 \therefore$  [4 is the solution] (-1, 0, 2, 3, 4)

$2m - 1 = 7 \rightarrow 8 - 1 = 7$

P.T.O



Q=5 Solve (a)  $x+7=14 \rightarrow x=14-7 \rightarrow x=7$

(c)  $\frac{b}{5}=4 \rightarrow b=4 \times 5 \rightarrow b=20$

(e)  $a-6=10 \rightarrow a=10+6 \rightarrow a=16$

(f)  $15=m+7 \rightarrow m=15-7 \rightarrow m=8$

Q=6 From the given statement, form an equation in the variable  $x$ .  
Solve the equation to find the unknown number.

(a) Think a number. Add 7 to it to get 10

Solution Let the number be  $x$

Add 7 to it to get 10

Equation:  $x+7=10$

$\therefore x=10-7=3$

(b) Think a number. Subtract 6 from it to get 16.

Solution Let the number be  $x$

Subtract 6 from it to get 16.

Equation  $x-6=16$

$\therefore x=16+6=22$

(c) Think a number. Double it to get 18.

Solution Let the number be  $x$

Double it to get 18

Equation  $2x=18$

$\therefore x = \frac{18}{2} = 9$

[NOTE:- REST OF THE PARTS DO YOUR SELF]

SHARPEN YOUR UNDERSTANDING ON BOOK

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CHAPTER 1- MENSURATION 10Class:- 6thMATH:- BUNIT:- 3RDExercise 10.1Q=1 Find the perimeter of the following figures

(a) fig on book

Solution Perimeter of the figure =  $6\text{cm} + 4\text{cm} + 2\text{cm} + 6\text{cm} = 18\text{cm}$ 

(b) fig on book

Sol. Perimeter of the figure =  $2\text{cm} + 5\text{cm} + 2\text{cm} + 8\text{cm} + 8\text{cm} + 2\text{cm} + 5\text{cm} = 32\text{cm}$ Q=2 Meera went around a park shown in figure. She took two complete rounds of it. What is the distance covered by her?Sol. figure on book

Distance covered by Meera = Perimeter

$$\text{Perimeter} = 14\text{cm} + 16\text{cm} + 16\text{cm} + 14\text{cm} + 30\text{cm} = 90\text{cm}$$

$$\therefore \text{Total distance covered} = 2 \times 90\text{cm} = 180\text{cm}$$

Q=3 Find the perimeter of the following rectangles:(a) length =  $26\text{cm}$ , Breadth =  $18\text{cm}$ 

$$\begin{aligned} \text{Solution} \quad \text{Perimeter of a rectangle} &= 2 \times (\text{length} + \text{breadth}) \\ &= 2 \times (26\text{cm} + 18\text{cm}) \\ &= 2 \times 44\text{cm} = 88\text{cm} \end{aligned}$$

Q=4 Find the perimeter of a rectangular ground whose length is  $230\text{m}$  and breadth is  $150.70\text{m}$ 

$$\begin{aligned} \text{Solution} \quad \text{Perimeter of a rectangular ground} &= 2 \times (\text{length} + \text{breadth}) \\ &= 2 \times (230\text{m} + 150.70\text{m}) = 2 \times 380.70\text{m} = 761.40\text{m} \end{aligned}$$

Q=5 Sushila wants to put a lace border all around a rectangular table cover, which is  $3\text{m}$  long and  $2\text{m}$  wide. Find the length of the lace required.

$$\begin{aligned} \text{Solution} \quad \text{Length of a lace required} &= \text{Perimeter of Table} \\ &= 2 \times (\text{length} + \text{breadth}) = 2 \times (3\text{m} + 2\text{m}) = 2 \times 5\text{m} = 10\text{m} \\ \text{Length of lace} &= 10\text{m}. \end{aligned}$$

Q=6Do your selfQ=7Do your selfQ=8Do your selfQ=9 The length and breadth of a rectangular field are  $22.5\text{m}$  and  $14.5\text{m}$  respectively. Find the cost of fencing its four sides at the rate of Rs 12 per meter.

P.T.O



Solution Length of fencing of a rectangular field  
 $= \text{Perimeter of rectangle} = 2 \times (l+b) = 2 \times (22.5+14.8) \text{ m}$   
 $= 2 \times 37 \text{ m} = 74 \text{ m}$

$\therefore$  cost of fencing at the rate of Rs 12 per meter  $= \text{Rs } 12 \times 74 = \text{Rs } 888$

Q=10 The length of a rectangle is twice its breadth. If its perimeter is 48m. Find the dimensions of the rectangle.

Solution Let the breadth of a rectangle be  $x \text{ m}$

So, length of rectangle  $= 2x \text{ m}$ .

$$\therefore \text{Perimeter} = 2 \times (l+b) = 2 \times (2x+x) = 2 \times 3x = 6x$$

$$\therefore 6x = \text{Perimeter} \Rightarrow 6x = 48 \text{ m} \Rightarrow x = \frac{48}{6} \text{ m} \Rightarrow x = 8 \text{ m}$$

So, breadth  $= 8 \text{ m}$  and length  $= 8 \times 2 = 16 \text{ m}$

### Exercise 10.2

Q=1 Find the perimeter of an equilateral triangle with each side measuring 12cm.

Solution Perimeter of an equilateral triangle  $= 3 \times \text{side} = 3 \times 12 \text{ cm} = 36 \text{ cm}$

Q=2 Find the perimeter of a square of each side 16cm.

Solution Perimeter of a square  $= 4 \times \text{side} = 4 \times 16 \text{ cm} = 64 \text{ cm}$

Q=3 Find the perimeter of a regular pentagon with each side measuring 12cm.

Solution Perimeter of a regular pentagon  $= 5 \times \text{side} = 5 \times 12 \text{ cm} = 60 \text{ cm}$

Q=4 Find the length of each side of a regular pentagon whose perimeter is 100 cm.

Solution Length of each side of a regular pentagon  $= \frac{\text{Perimeter}}{5}$   
 $= 100 \div 5 = 20 \text{ cm}$

Q=5 Find the length of each side of regular octagon whose perimeter is 80 cm.

Solution Length of each side of a regular octagon  $= \frac{\text{Perimeter}}{8}$   
 $= 80 \text{ cm} \div 8 = 10 \text{ cm}$

Q=6 Do your self Q=7 Do your self.

Q=8 A rectangular wire measuring  $18 \text{ m} \times 10 \text{ m}$  is cut at a point. A square is made from this wire. What is the side of the square?

Solution Length of wire  $= 2 \times (\text{length} + \text{breadth}) = 2 \times (18 \text{ m} + 10 \text{ m}) = 2 \times 28 \text{ m} = 56 \text{ m}$   
 A square is made from this wire  $\Rightarrow$  Perimeter of a square  $= 56 \text{ m}$   
 Side of a square  $= \text{Perimeter} \div 4 = 56 \text{ m} \div 4 = 14 \text{ m}$



Q=9 Do your self

Q=10 Do your self.

Exercise 10.3

Q=1 Find the area of the following figures.

(a) fig on book (sol) fig. contains 7 complete squares  $\Rightarrow$  So, Area = 7 sq. cm(d) fig on book (sol) fig. contains 10 complete  $\Rightarrow$  So, Area = 10 sq. cm.

Q=2 Find the area of the following figures.

(a) fig on book (sol) fig. contains 6 complete squares and 4 half squares.

$$\text{So, Area} = 6\text{cm} \times \frac{4}{2}\text{cm} = 6\text{cm} \times 2\text{cm} = 8\text{ sq. cm.}$$

(d) fig on book (sol) fig. contains 4 complete squares and 4 half squares.

$$\text{So, Area} = 4\text{ sq. cm} + \frac{4}{2}\text{ sq. cm} = 4\text{ sq. cm} + 2\text{ sq. cm} = 6\text{ sq. cm.}$$

Q=3 Do your self

Q=4 Do your self.

[NOTE:- Rest of the parts do your self]

Exercise 10.4

Q=1 The length and breadth of a rectangle are 12cm and 8cm. Find its area and perimeter.

$$\text{Solution: Perimeter} = 2 \times (l+b) \Rightarrow 2 \times (12\text{cm} + 8\text{cm}) = 2 \times 20\text{cm} = 40\text{cm}$$

$$\text{Area} = l \times b = 12\text{cm} \times 8\text{cm} = 96\text{ sq. cm.}$$

Q=2 Find the area and the perimeter of a square of each side 8cm.

$$\text{Solution: Perimeter of square} = 4 \times \text{side} = 4 \times 8\text{cm} = 32\text{cm.}$$

$$\text{Area of a square} = \text{Side} \times \text{side} = 8\text{cm} \times 8\text{cm} = 64\text{ sq. cm.}$$

Q=3 Do your self.

Q=4 A room is 8m long and 6m wide. Find the cost of white washing its ceiling at Rs 11 per square meter.

$$\text{Solution: Area of a rectangular ceiling} = l \times b = 8\text{m} \times 6\text{m} = 48\text{ sq. m.}$$

$$\text{Cost of white washing} = \text{Rs } 11 \times 48 = \text{Rs } 528$$

Q=5 How many square meters of glass will be required for a window whose length is 1.5m and breadth is 1m?

$$\text{Solution: Area of window} = l \times b = 1.5\text{m} \times 1\text{m} = 1.5\text{ sq. m.}$$

$$\text{Glass required for window} = 1.5\text{ sq. m.}$$

Q=6 Do your self.

Q=7 The area of square of each side 16cm is the same as that of a rectangle of length 32cm. Find the breadth of the rectangle.

Solution

$$\text{Area of a square} = \text{Side} \times \text{side}$$

P.T.O



$$= 16 \times 16 \text{ Sq. cm} = 256 \text{ Sq. cm}$$

Area of a rectangle = Area of a square =  $l \times b = 256 \text{ Sq. cm}$

$$32 \text{ cm} \times b = 256 \text{ Sq. cm} \Rightarrow b = \frac{256}{32} \text{ cm} \Rightarrow b = 8 \text{ cm}$$

Q=8 Do your self

Q=9 Do your self

Q=10 Do your self

Q=11 Do your self

Q=12 The perimeter of a rectangular park is 56 m. its length is 16 m. Find its area. Find the cost of levelling it at the rate of Rs 3 per square meter.

Solution Perimeter of a rectangular park = 56 m, length = 16 m

$$2(l+b) = 56 \text{ m} \Rightarrow 2 \times (16 \text{ m} + b) = 56 \text{ m}$$

$$16 \text{ m} + b = \frac{56}{2} \text{ m} \Rightarrow 16 \text{ m} + b = 28 \text{ m} \Rightarrow b = 28 \text{ m} - 16 \text{ m} \Rightarrow 12 \text{ m}$$

$$\text{Area of a rectangular park} = l \times b = 16 \text{ m} \times 12 \text{ m} = 192 \text{ Sq. m}$$

$$\text{Cost of levelling the park} = \text{Rs } 192 \times 3 = \text{Rs } 576$$

Q=13 Do your self.

Q=14 Find the area of each of the following figures by splitting the figure into rectangles and squares.

Solution (a) Area of a rectangle A =  $2 \text{ cm} \times 12 \text{ cm} = 24 \text{ Sq. cm}$  (a)

$$\text{Area of a rectangle B} = 2 \text{ cm} \times 6 \text{ cm} = 12 \text{ Sq. cm}$$

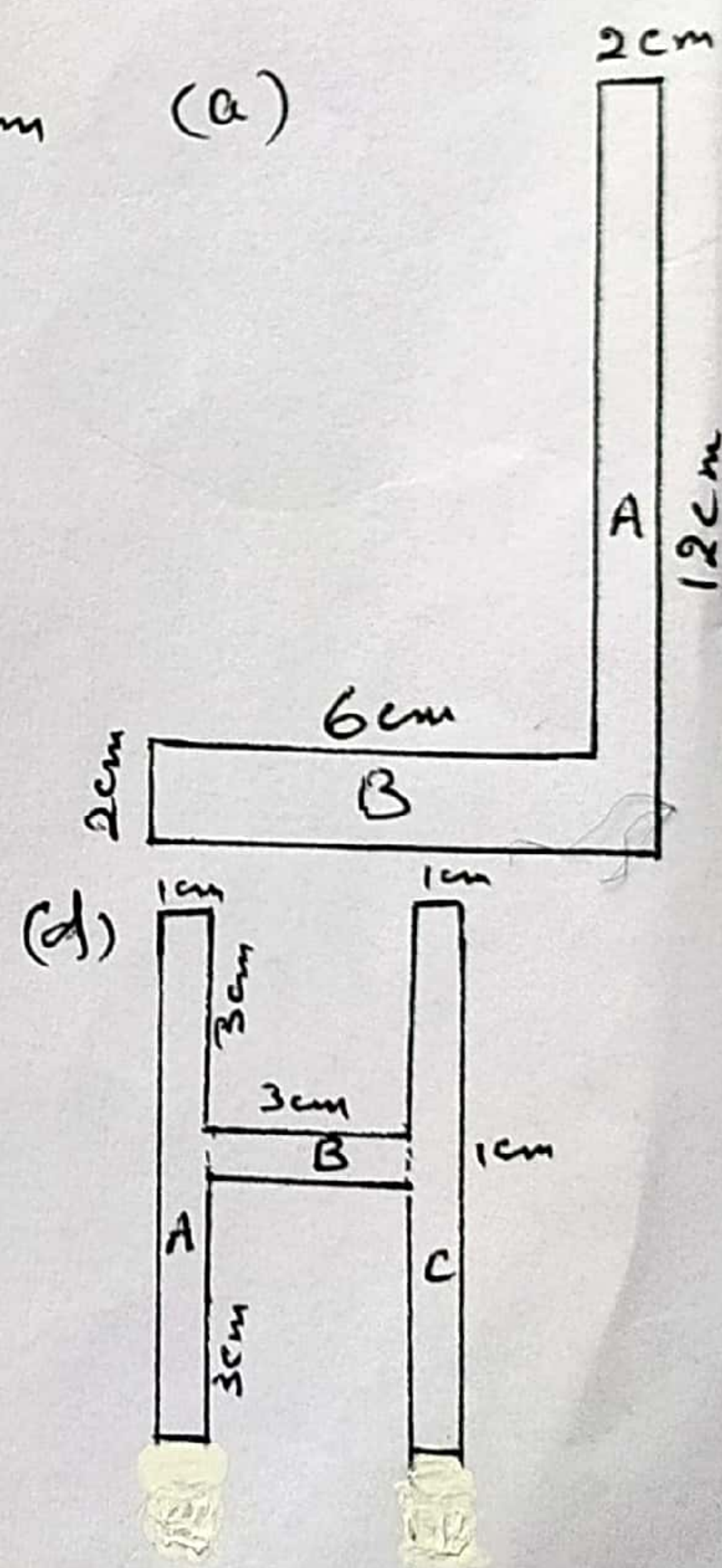
$$\text{Total Area} = 24 \text{ Sq. cm} + 12 \text{ Sq. cm} = 36 \text{ Sq. cm}$$

Solution (d) Area of a rectangle A =  $1 \text{ cm} \times 7 \text{ cm} = 7 \text{ Sq. cm}$

$$\text{Area of a rectangle B} = 1 \text{ cm} \times 3 \text{ cm} = 3 \text{ Sq. cm}$$

$$\text{Area of a rectangle C} = 1 \text{ cm} \times 7 \text{ cm} = 7 \text{ Sq. cm}$$

$$\text{Total Area} = 7 \text{ Sq. cm} + 3 \text{ Sq. cm} + 7 \text{ Sq. cm} = 17 \text{ Sq. cm.}$$



[NOTE:- Rest of the parts do your self]

[SHARPEN YOUR UNDERSTANDING ON BOOK

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