Published by
National Curriculum and Textbook Board
69-70, Motijheel Commercial Area, Dhaka-1000.

First Print (Bangla version) : September 2005
First Print (English Version) : February 2007
2nd Print (English version) : March 2008
Reprint (English Version) : April 2009

Computer Graphic
Laser Scan Limited
15/2, Topkhana Road, BMA Bhaban.

Cover & Illustrations:
Domion Neoton Pinaru

Picture Coloured by
Ahmed Ullah

Design
National Curriculum and Textbook Board

Website version developed by Mars Solutions Limited

Preface

For improving the existing quality of Primary Education in Bangladesh, National Curriculum and Textbook Board (NCTB) in collaboration with PEDP-2 initiated an extensive program for development of curriculum and teaching learning materials in 2002. In the light of this program the curriculum, textbooks and other teaching learning materials of Primary levels have been prepared, revised and evaluated.

The textbook entitled, **'Christian Religious Studies'** has been prepared on the basis of attainable competencies for the students of Class Five. The subject matter of the textbook is derived from the basic issues of the religion familiar to the children through their family practices. This will facilitate our young learners to know how they can make best use of this religious knowledge & values in their day-to-day life.

The contents of the book are analyzed and explained in such a manner with practical examples, illustrations and system of planned activities, that students are inspired to study the subject with a keen interest.

This book is originally published in Bangla. From this year NCTB is publishing the English version of the textbook. English is the language of choice in today's globalized world. To facilitate the verbal and written communication skills of our future citizens and suitably prepare them for international competition, we decided to translate the original Bangla textbooks into English. It's pleasant to note that the number of English medium schools in Bangladesh is increasing very fast. In this context NCTB decided to publish all the textbooks of Primary level in English. This was a big endeavour for us. Despite our all efforts the first edition may not be totally error free. However, in the future editions we shall try to remove all errors and discrepancies.

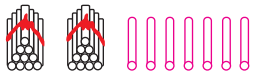
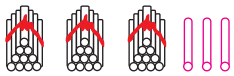
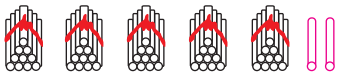
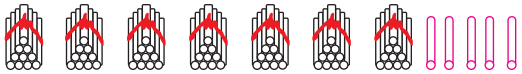
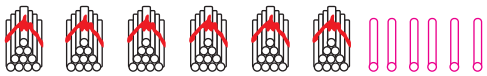
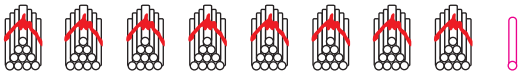
Finally, I would like to express my heartfelt thanks and gratitude to those who have made their valuable contributions in writing, editing, evaluating and translating this book. I sincerely hope that the book will be useful to those for whom it has been prepared.

Prof. Md. Mostafa Kamaluddin
Chairman
National Curriculum and Textbook Board
Dhaka

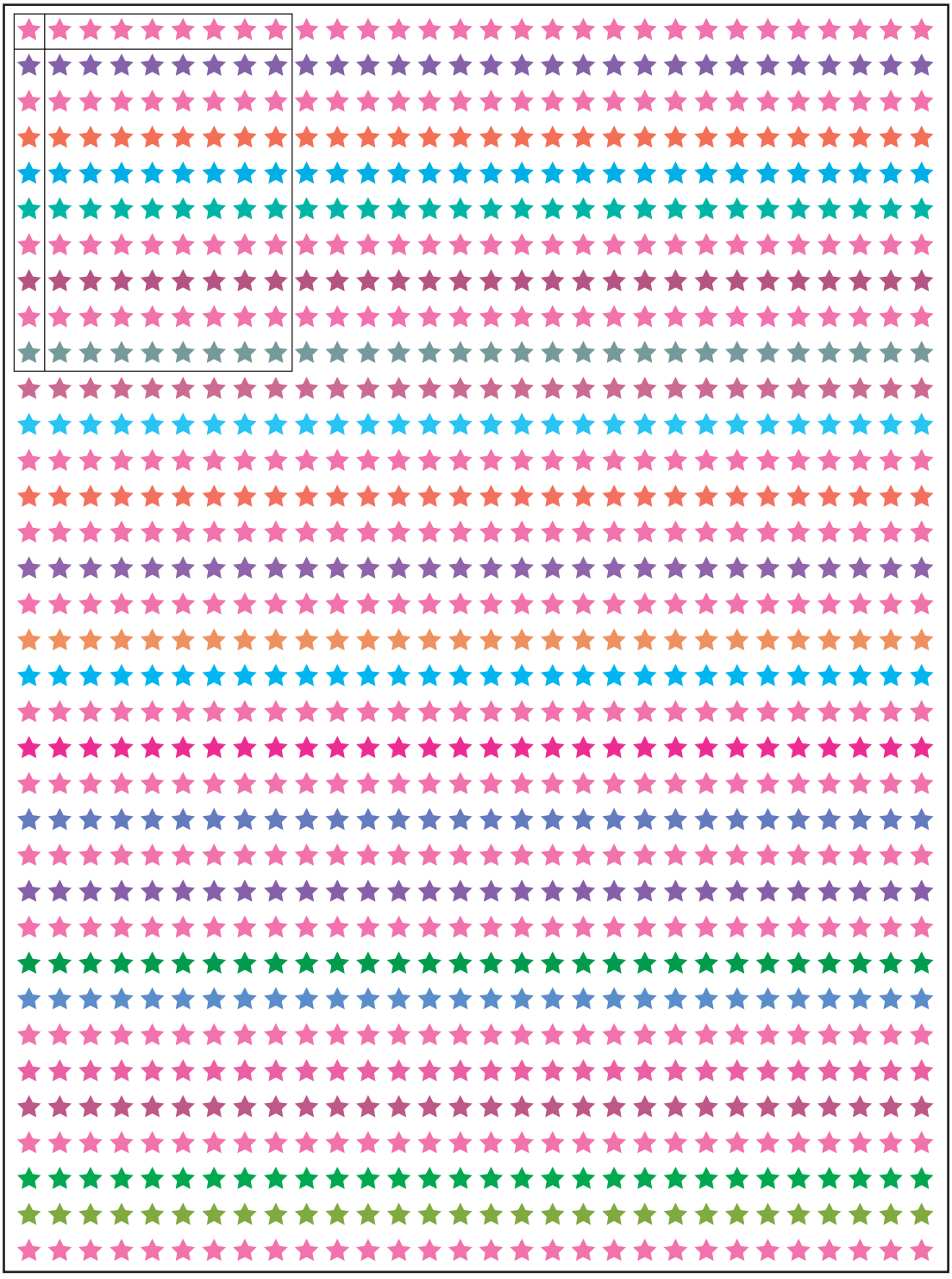
Contents

Number

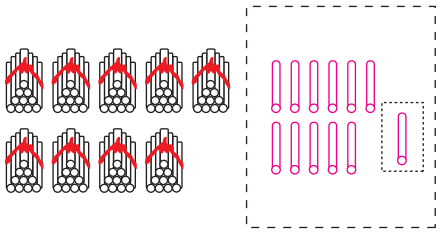
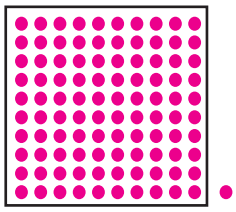
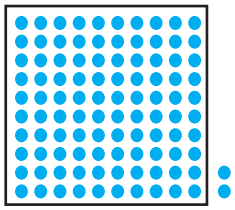
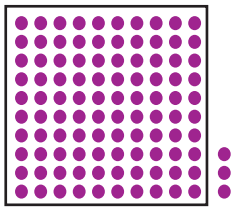
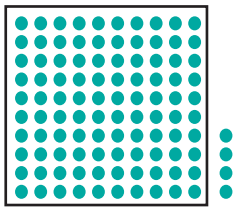
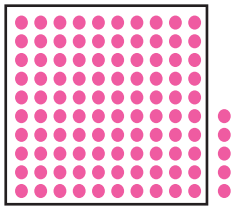
Count, read and write (One is done for you)

Picture	Write in tens with ten	Write in number	Write in words
	1 ten 8	18	Eighteen
	ten		
	ten		
	ten		
	ten		
	ten		
	ten		
	ten		
	ten		
	ten		

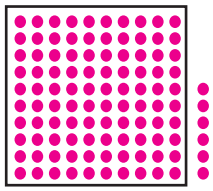
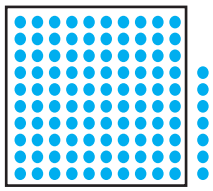
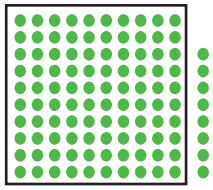
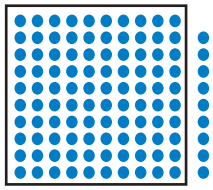
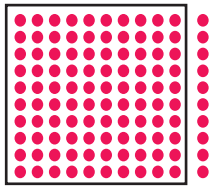
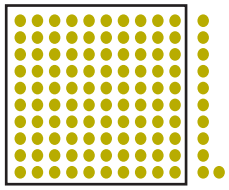
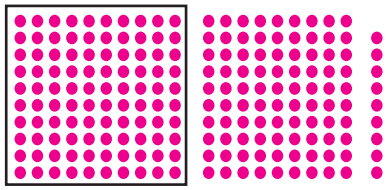
Form groups of tens and hundreds (One is done for you)



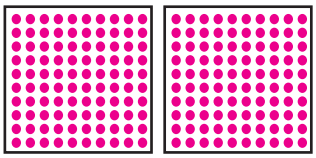
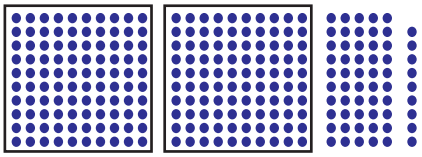
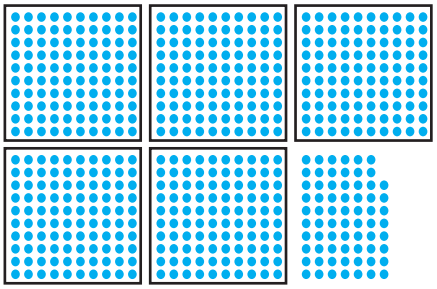
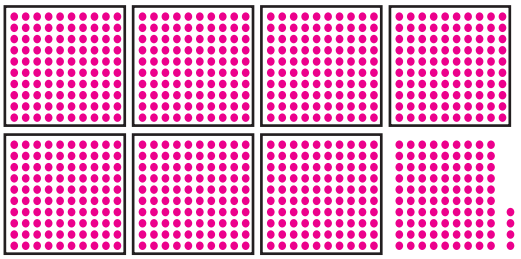
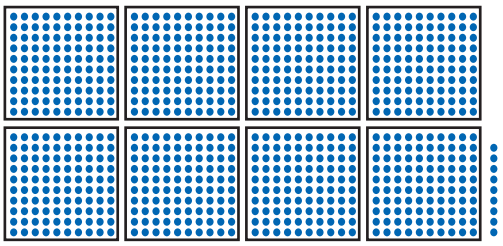
Count and read

	9 tens nine and one equal to 10 tens equal to 1 hundred 99 + 1 = 100 One hundred	
	1 hundred 1	101 One hundred one
	1 hundred 2	102 One hundred two
	1 hundred 3	103 One hundred three
	1 hundred 4	104 One hundred four
	1 hundred 5	105 One hundred five

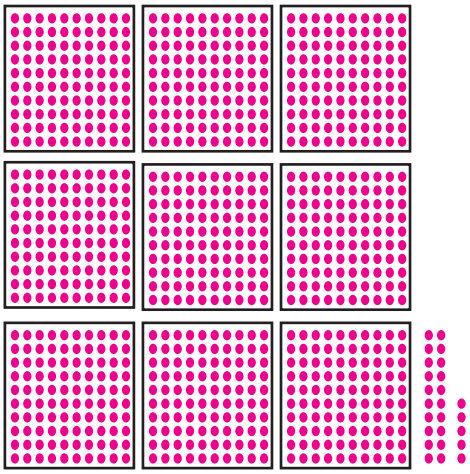
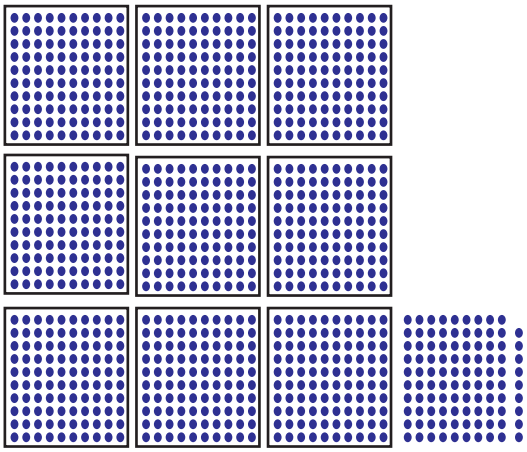
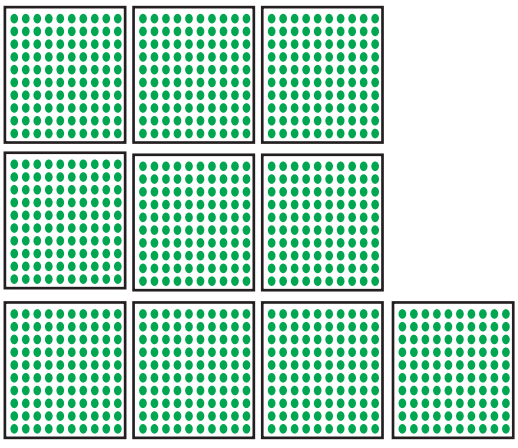
Count and read

	1 hundred 6	106 One hundred and six
	1 hundred 7	107 One hundred and seven
	1 hundred 8	108 One hundred and eight
	1 hundred 9	109 One hundred and nine
	1 hundred 1 ten	110 One hundred and ten
	1 hundred 1 ten 1	111 One hundred and eleven
	1 hundred 9 tens 9	199 One hundred and ninety nine

Count and read

	2 hundred	200 Two hundred
	2 hundred 5 tens and 9	259 Two hundred and fifty nine
	5 hundred 6 tens and 8	568 Five hundred and sixty eight
	7 hundred 9 tens and 4	794 Seven hundred and ninety four
	8 hundred 0 ten and 9	809 Eight hundred and nine

Count and read

	9 hundred 2 tens and 5	925 Nine hundred and twenty five
	9 hundred 9 tens and 9	999 Nine hundred and ninety nine
	10 hundred or 1 thousand	1000 One thousand

Count and read

	1 ten	10 Ten
	2 tens	20 Twenty
	3 tens	30 Thirty
	4 tens	40 forty
	5 tens	50 Fifty
	6 tens	60 Sixty
	7 tens	70 Seventy
	8 tens	80 Eighty
	9 tens	90 Ninety
	10 tens	100 one hundred

Counting hundredwise

Count and read

	1 hundred	100 One hundred
	2 hundred	200 Two hundred
	3 hundred	300 Three hundred
	4 hundred	400 Four hundred
	5 hundred	500 Five hundred
	6 hundred	600 Six hundred
	7 hundred	700 Seven hundred
	8 hundred	800 Eight hundred
	9 hundred	900 Nine hundred
	10 hundred	1000 one thousand

Counting Thousandwise

Count and read

	1 thousand	1000 One thousand
	2 thousand	2000 Two thousand
	3 thousand	3000 Three thousand
	4 thousand	4000 Four thousand
	5 thousand	5000 Five thousand
	6 thousand	6000 Six thousand
	7 thousand	7000 Seven thousand
	8 thousand	8000 Eight thousand
	9 thousand	9000 Nine thousand
	10 thousand	10,000 Ten thousand

Count

Number in digits	Thousands		Hundreds	Tens	Ones	Number in words
	Ten thousand	thousand				
101			1	0	1	One hundred and one
109			1	0	9	One hundred and nine
115			1	1	5	One hundred and fifteen
519			5	1	9	Five hundred and nineteen
1000		1	0	0	0	One thousand
1928		1	9	2	8	One thousand nine hundred and twenty eight
2379		2	3	7	9	Two thousand three hundred and seventy nine
4830		4	8	3	0	Four thousand eight hundred and thirty
7075		7	0	7	5	Seven thousand and seventy five
8609		8	6	0	9	Eight thousand six hundred and nine
9999		9	9	9	9	Nine thousand nine hundred and ninety nine
10,000	1	0	0	0	0	Ten thousand

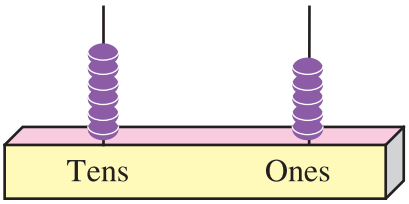
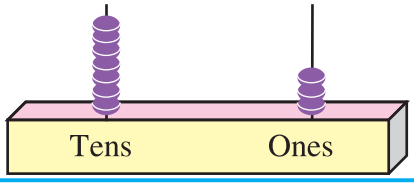
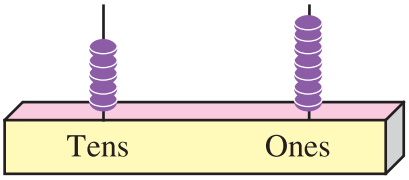
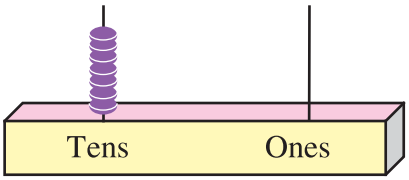
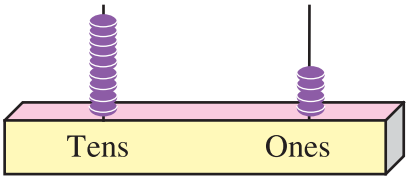
Read, then write in numbers and words (One is done for you)

Number in digits	Thousands		Hundreds	Tens	Ones	Number in words
	Ten thousand	thousand				
5739		5	7	3	9	Five thousand seven hundred and thirty nine
425						
1640						
3333						
5009						
4270						
10,000						
6085						
9601						

Read and write in numerals (One is done for you)

Number in words	Thousands		Hundreds	Tens	Ones	Number in numserals
	Ten thousand	thousand				
Two thousand seven hundred and eighty nine		2	7	8	9	2789
Three hundred and eighty						
Eight hundred and five						
One thousand nine hundred						
Four thousand and seventy five						
Seven thousand three hundred and forty two						
Eight thousand and eighty						
Nine thousand nine hundred and ninety						
Ten thousand						

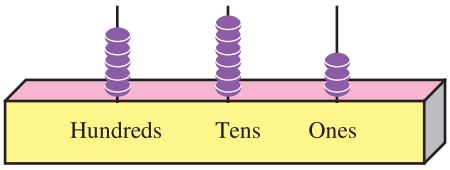
Place Value

Write numbers by looking at the pictures (One is done for you)	Write the place value (One is done for you)
 6 5	Tens Ones 6 9 9 Ones = 9 6 Tens = 60
	Tens Ones 8 1
	Tens Ones 7 5
	Tens Ones 4 9
	Tens Ones 9 9

Look at the numbers below and write the numerals in the spaces for tens and ones (One is done for you)

34	Ones 4 Tens 3	52	Ones ____ Tens ____	68	Ones ____ Tens ____
91	Tens ____ Ones ____	87	Tens ____ Ones ____	78	Tens ____ Ones ____

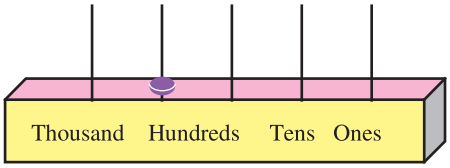
Place Value



Five hundred six tens three ones
= 5 hundred 6 tens 3 ones = 563

H T O (H=Hundreds, T=Tens, O=Ones)
5 6 3

3 ones	=	3
6 tens	=	60
5 hundred	=	500

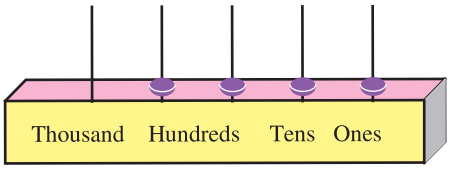


1 thousand or 1
= 1000

Picture

Th H T O (Th = thousand)
1 0 0 0

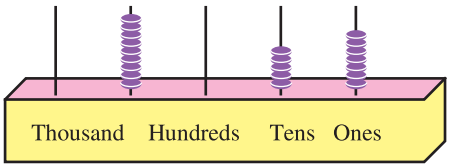
0 ones	=	0
0 tens	=	0
0 hundred	=	0
1 thousand	=	1000



1 thousand 1 hundreds 1 tens 1 ones
= 1 thousand 1 hundred 1 ten 1
= 1111

Th H T O
1 1 1 1

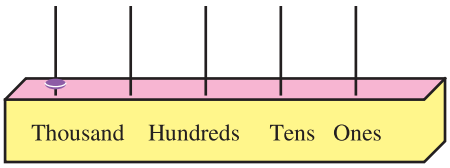
1 ones	=	1
1 tens	=	10
1 hundred	=	100
1 thousand	=	1000



9 thousand 0 hundreds 5 tens 7 ones
= 9 thousand 0 hundred 5 ten 7
= 9057

Th H T O
9 0 5 7

7 ones	=	7
5 tens	=	5
0 hundred	=	0
9 thousand	=	9000



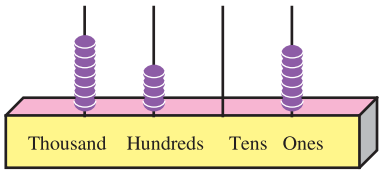
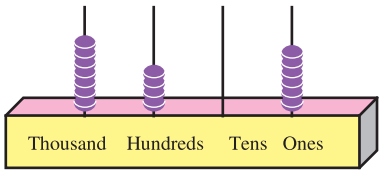
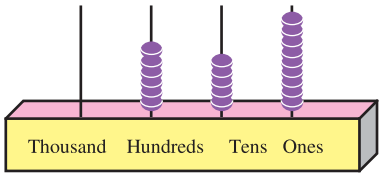
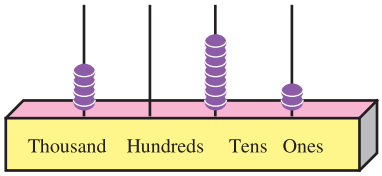
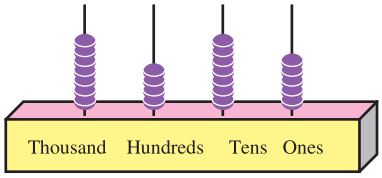
1 --?
= 10 thousand
= 10000

1 -- = 10 thousand

L Th H T O (L = Lac)
1 0 0 0 0

0 ones	=	0
0 tens	=	0
0 hundred	=	0
0 thousand	=	0
1--	=	10000

Place Value

Write down the numbers by looking at the pictures (One is done for you)	Write down the place value (One is done for you)
 7406	Th H T O 5 0 9 2 2 ones = 2 9 tens = 90 0 hundred = 0 5 thousand = 5000
	Th H T O 3 8 5 1
	Th H T O 6 2 0 9
	Th H T O 7 1 6 5
	Th H T O 9 9 8 9

Place Value

-	Thousand	Hundreds	Tens	Ones	Number in words
				1	One
			1	0	Ten
		1	0	0	One hundred
	1	0	0	0	One thousand
1	0	0	0	0	Ten thousand

Example 1. Find out the place value of each of the numerals of the number 7943.

7 9 4 3

Place value of 3 = 3 ones = 3

Place value of 4 = 4 tens = 40

Place value of 9 = 9 hundred = 900

Place value of 7 = 7 thousand = 7000

Example 2. Find out the place value of each of the numerals of the number 8025.

8 0 2 5

Place value of 5 = 5 ones = 5

Place va lue of 2 = 2 tens = 20

Place value of 0 = 0 hundred = 0

Place value of 8 = 8 thousand = 8000

Find out the place value (Two are done for you)

8529				5947	
Place value of 9	=	9		Place value of 7	=
Place value of 2	=	20		Place value of 4	=
Place value of 5	=	500		Place value of 9	=
Place value of 8	=	8000		Place value of 5	=
694				4806	
Place value of 4	=	4		Place value of 8	=
Place value of 9	=	90		Place value of 6	=
Place value of 6	=	600		Place value of 0	=
				Place value of 4	=
9705				8092	
Place value of 7	=			Place value of 9	=
Place value of 5	=			Place value of 0	=
Place value of 0	=			Place value of 2	=
Place value of 9	=			Place value of 8	=
9864				2987	
Place value of 9	=			Place value of 2	=
Place value of 4	=			Place value of 7	=
Place value of 8	=			Place value of 9	=
Place value of 6	=			Place value of 8	=

Odd and Even numbers

Even Numbers	Odd Numbers
10, 32, 54, 76, 98 In the ones columuns of these numbers, there are 0, 2, 4, 6, 8. So, if there are 0, 2, 4, 6 or 8 in the ones columns of any numbers those are called even numbers.	21, 43, 55, 67, 89 In the ones columns of the numbers, there are 1, 3, 5, 7, 9. So, if there are 1, 3, 5, 7 or 9 in the ones columns of any numbers, then those are odd numbers.

Write the odd and the even numbers separately in the empty boxes from the numbers below (one is done for you)

Number	Even Number	Odd Number
89, 314, 336, 423, 667, 134, 245, 98	314, 336, 134, 98	89, 423, 667, 245
116, 223, 425, 356, 237, 430, 278, 409		
609, 708, 534, 463, 612, 615, 727, 790		
1020, 1042, 1045, 1057, 2131, 3134, 3336, 2223		
809, 970, 4336, 5127, 6241, 6565, 5798		
7001, 7203, 7310, 5436, 905, 938, 6292, 10000		
3572, 5718, 4679, 791, 8843, 9992, 4445, 97		

Comparison of Numbers

Determine greater/smaller numbers and write them using signs

78 = 7 tens 8 61 = 6 tens 1 ∴ 78 is Greater, 61 is smaller or, 78 > 61; > Greater sign Rules for reading : 78 is Greater than 61. Again, it can be written like this. 61<78; < smaller sign Rules for reading : 61 is smaller than 78	Between two numbers of two numerals, that number is greater which contains greater numbers in tens.
94 = 9 tens 4 98 = 9 tens 8 ∴ 94 smaller, 98 is greater or, 94 < 98	If the numerals in tens of two numbers are equal, then the number having the smaller numerals in ones is smaller.
100 = 10 tens 99 = 9 tens 9 ∴ 100 is greater, 99 is smaller or, 100 > 99	A number of three digits is greater than any number of two digits.
475 = 4 hundred 7 tens 5 459 = 4 hundred 5 tens 9 ∴ 475 is greater, 459 is smaller or, 475 > 459	If the numerals in hundred are the same then the number countaining greater digit in tens is greater.

Comparison of Numbers

147 = 1 hundred 4 tens 7 148 = 1 hundred 4 tens 8 ∴ 147 is smaller, 148 is greater or, 147 < 148	If the numerals in hundred and tens are the same then the number having the greater digit in ones is greater.
801 = 8 hundred 0 tens 1 699 = 6 hundred 9 tens 9 ∴ 801 is greater, 699 is smaller or, 801 > 699	Between the two numbers of three digits, the number which contains the greater digits in the hundred is greater.
8725 = 8 thousand 7 hundred 2 tens 5 9878 = 9 thousand 8 hundred 7 tens 8 ∴ 8725 is smaller, 9878 is greater or, 8725 < 9878	Between the two numbers of four digits, the number which contains the greater digit in the thousands is greater.
6789 = 6 thousand 7 hundred 8 tens 9 6776 = 6 thousand 7 hundred 7 tens 6 ∴ 6789 is greater, 6776 is smaller	If the digits in thousands are the same then the greater or smaller is to be determind by the digits in hundred tens and ones.
10000 = 10 thousand 9999 = 9 thousand 9 hundred 9 tens 9 ∴ 10000 is greater, 9999 is smaller or, 10000 > 9999	Between the two numbers if one is of five digits and the other is of four digits, then the number of five digits is always greater.

Determine greater/smaller numbers and write them using signs (three are done for you)

207, 211 207 is smaller, 211 is greater	207 < 211
289, 283 289 is greater, 283 is smaller	289 > 283
790, 892 892is greater, 790 is smaller	892 > 790
301, 299 — greater,— smaller	
3452, 3500 — lesser,— greater	
4571, 4671 —greater,— smaller	
6789, 7790 — greater, — smaller	
7028, 7038 — smaller,— greater	
8109, 8099 — smaller, — greater	
9909, 9999 —greater,—smaller	
6006, 6077 — smaller,— greater	

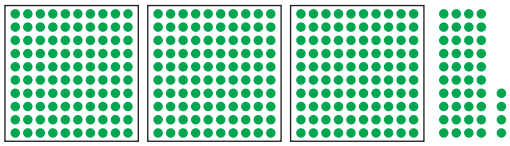
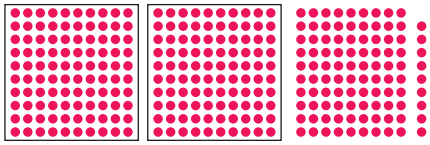
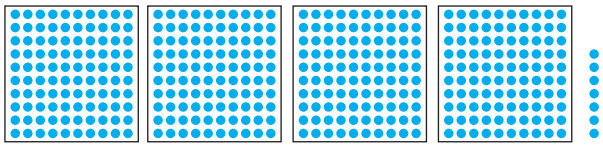
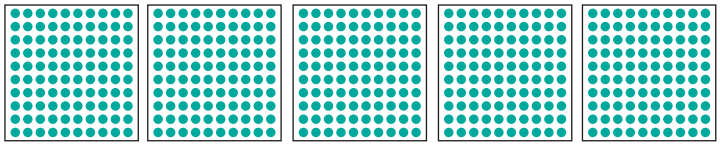
Arranging Numbers in Order
Ordering from greater to smaller and from smaller to greater

88, 59, 76, 91 Here, 91 is greater, 88 is smaller 88 is greater, 76 is smaller 76 is greater, 59 is smaller ∴ 91, 88, 76, 56 or, 91 > 88 > 76 > 59	88, 59, 76,91 Here, 59 is smaller, 76 is greater 76 is smaller, 88 is greater 88 is smaller, 91 is greater ∴ 59, 76, 88, 91 or, 59 < 76 < 88 < 91
340, 356, 389, 346 Here, 389 is greater, 356 is smaller 356 is greater, 356 is smaller 346 is greater, 340 is smaller ∴ 389, 356, 346, 340 or, 389 > 356 > 346 > 340	340, 356, 389, 346 Here, 340 is smaller, 346 is greater 346 is smaller, 356 is greater 356 is smaller, 389 is greater ∴ 340, 346, 356, 389 or, 340 < 346 < 356 < 389
781, 692, 835, 901, 792 Here, 901 is greater, 385 is smaller 835 is greater, 792 is smaller 792 is greater, 781 is smaller 781 is greater, 692 is smaller ∴ 901, 835, 792, 781, 692 or, 901 > 835 > 792 > 781 > 692	781, 692, 835, 901, 792 Here, 692 is smaller, 781 is greater 781 is smaller, 792 is greater 792 is smaller, 835 is greater 835 is smaller, 901 is greater ∴ 692, 781, 792, 835, 901 or, 692 < 781 < 792 < 835 < 901

Arrangement of Numbers in Order.
Arrange the numbers from greater to smaller and from smaller to greater. (One is done for you)

Numbers	From greater to smaller	From smaller to greater
91, 78, 99, 70, 66	99, 91, 78, 70, 66 99>91>78>70>66	66, 70, 78, 91, 99 66<70<78<91<99
677, 777, 690, 791, 760		
409, 496, 460, 480, 491		
699, 791, 889, 691, 776		
99, 81, 77, 100, 107, 103		
875, 760, 870, 799, 800		
499, 509, 480, 600, 700		
600, 802, 714, 799, 607		
999, 899, 890, 799, 900		
599, 590, 600, 670, 672		
779, 680, 791, 699, 709		

Exercise- 1

1. Look at each row, count the dots and write the numbers.	in numbers	in words
		
		
		
		

2. Write the numbers from 105 to 160 ascending order.

3. Read the numbers below and write in numerals in the empty boxes

2 hundred 5 tens 9		7 thousand 7 hundred 8	
6 hundred 3 tens		5 thousand 5 hundred 5 tens 5	
9 hundred 8		8 thousand	
1 thousand 4 hundred 7 tens 1		9 thousand 3 hundred 4	
3 thousand 9 tens		9 thousand 9	

4. Write in numerals:

One hundred and two, Eight hundred and ninety, Nine hundred and six, Three thousand five hundred and thirty two, Seven thousand and eighty four, Five thousand four hundred and nineteen, Eight thousand eight hundred and eighty eight, Six thousand and one, Nine thousand and ninety, Ten thousand

5. Write in words :

   202, 543, 960, 1369, 3095, 5807, 6666, 7950, 8009, 9070

6. Fill in the boxes :

   a. 10, 20, ☐, ☐, ☐, 60, ☐, 80, ☐ 100

   b. 100, ☐, 300, 400, ☐ ☐ 700, ☐ ☐ 1000

   c. 1000, ☐, ☐, 4000, 5000, ☐, ☐,
   ☐ 9000, ☐ .

7. Fill in the boxes and write down the place value of the numbers below : (one is done for you)

	in 5367	in 6753	in 7536	in 3675
Place value of 7 =	7	700	7000	70
Place value of 6 =				
Place value of 5 =				
Place value of 3 =				

8. Put a circle in the appropriate number : (one is done for you)

   a. Which number does have 3 in its tens? 453 391 (732)

   b. Which number does have 5 in its thousand? 9250, 7536, 5129

   c. Which number does have 9 in its ones? 6219, 9126, 2691

   d. Which number does have 1 in its hundred? 8601, 6190, 1432

   e. Which number does have 7 in its tens? 4670, 7203, 6715

9. Write down the numbers that go before and after the given numbers in the boxes :

☐ 499 ☐ ; ☐ 578 ☐ ;

☐ 705 ☐ ; ☐ 900 ☐ .

10. Find out the greater/smaller number from the pairs below :

365, 356; 834, 921; 2485, 2396;

5298, 6189; 7009, 9007; 8000, 7999;

11. Arrange the numbers from greater to smaller and from smaller to greater :

a. 432, 428, 565, 605, 342

b. 702, 720, 699, 996, 969

c. 583, 848, 584, 398, 839

d. 3670, 3706, 4021, 4210, 3999

12. Separate the odd and the even numbers and then, write them from smaller to greater :

384, 495, 999, 2530, 4268, 3597

6092, 7381, 8643, 9776

13. Put the greater/smaller signs in the boxes below :

a. 463 ☐ 436 b. 800 ☐ 809

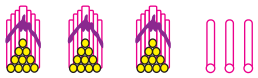
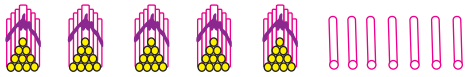
c. 2532 ☐ 2352 d. 5899 ☐ 6000

e. 3609 ☐ 3906 ☐ 4000

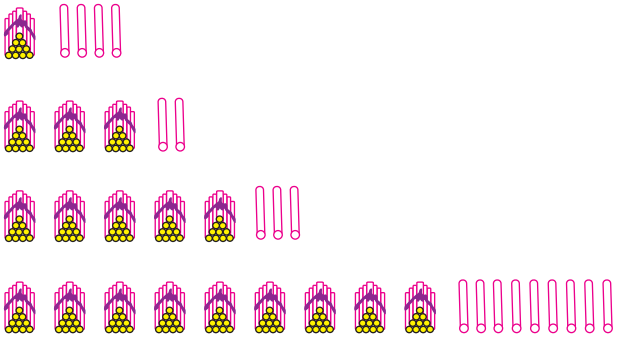
f. 8990 ☐ 9899 ☐ 9099

Addition

Add (without carrying)

34	3 tens 4	
+23	+ 2 tens 3	
57	5 tens 7	

14	1 ten 4
32	3 tens 2
+ 53	+ 5 tens 3
99	9 tens 9



602	6 hundred 0 ten 2
154	1 hundred 5 tens 4
+ 230	+ 2 hundred 3 tens 0
986	9 hundred 8 tens 6

1021	1 thousand 0 hundred 2 tens 1
3202	3 thousand 2 hundred 0 ten 2
143	1 hundred 4 tens 3
+ 4430	4 thousand 4 hundred 3 tens o
8796	8 thousand 7 hundred 9 tens 6

365 + 34

= 3 hundred 6 tens 5+3 tens 4

= 3 hundred 9 tens 9

= 399

4031 + 41 + 1906

= 4 thousand 0 hundred 3 tens 1 + 4 tens 1 + 1 thousand 9 hundred 0 ten 6

= 5 thousand 9 hundred 7 tens 8

= 5978

Add

54 + 45 99	402 + 397 799	42 613 + 200 855	1007 3450 2021 + 3520 9998

63 + 36 = 99

721 + 12 + 100 = 833

4021 + 305 + 1452 = 5778

42 + 24	50 + 24	60 + 39
641 + 256	310 + 421	413 + 264
31 27 + 41	260 107 + 321	429 360 + 100
10 21 45 + 13	3021 2405 + 3272	2104 1540 3202 + 3153

24 + 43 = ☐

50 + 39 = ☐

402 + 396 = ☐

529 + 40 = ☐

24 + 42 + 13 = ☐

340 + 103 + 41 = ☐

501 + 48 + 350 = ☐

32 + 21 + 32 + 14 = ☐

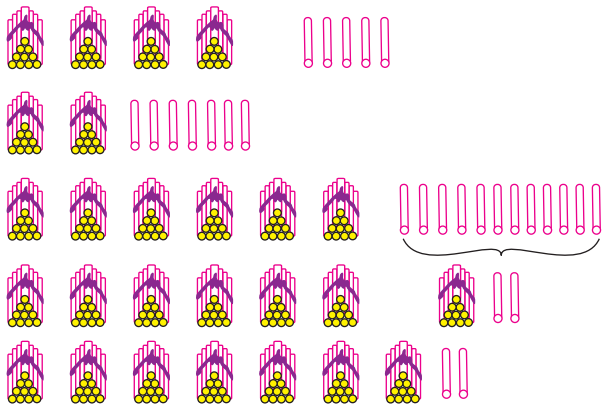
2041 + 3425 + 2130 = ☐

4102 + 1534 + 2051 = ☐

Add (with carrying)

45 + 27 = 72

4 tens 5 + 2 tens 7 = 6 tens 12 = 7 tens 2 = 72



$$\begin{array}{r} {\scriptstyle (+1)} \\ 7\ 8 \\ +\ 1\ 5 \\ \hline 9\ 3 \end{array}$$

7 tens 8
+ 1 tens 5
8 tens 13

= 9 tens 3
= 93

$$\begin{array}{r} {\scriptstyle (+1)\,(+1)} \\ 4\ 3\ 7 \\ 2\ 6\ 5 \\ +\ 1\ 7\ 2 \\ \hline 8\ 7\ 4 \end{array}$$

4 hundred 3 tens 7
2 hundred 6 tens 5
+ 1 hundred 7 tens 2
7 hundred 16 tens 14

= 7 hundred 17 tens 4

= 8 hundred 7 tens 4
=874

96 + 89
= 9 tens 6 + 8 tens 9
= 17 tens +15

= 18 tens 5
= 185

65	484	167
+ 37	+ 879	452
102	1363	+ 374
		993

88 + 77 = 165
148 + 561 + 67 = 776

Add (with Carrying)

49	76	89
+ 63	+ 67	+ 98
450	387	572
+ 368	+ 508	+ 489
147	350	508
282	407	490
+ 306	+ 284	+ 373

35 + 46 = ☐
57 + 44 = ☐
68 + 52 = ☐
124 + 238 = ☐
480 + 367 = ☐
204 + 386 + 42 = ☐
382 + 268 + 100 = ☐

(+1) (+1) (+1) 1 2 3 5 2 3 1 4 + 6 8 2 4 2 3 1	1 thousand 2 hundred 3 tens 5 2 thousand 3 hundred 1 tens 4 6 hundred 8 tens 2 = 3 thousand 11 hundred 12 tens 11 = 3 thousand 11 hundred 13 tens 1 = 3 thousand 12 hundred 3 tens 1 = 4 thousand 2 hundred 3 tens 1 = 4231
(+1) (+1) (+1) 3 4 2 5 3 3 6 7 1 3 8 2 +1 6 4 6 9 8 2 0	3 thousand 4 hundred 2 tens 5 3 thousand 3 hundred 6 tens 7 1 thousand 3 hundred 8 tens 2 1 thousand 6 hundred 4 tens 6 8 thousand 16 hundred 20 tens 20 = 8 thousand 16 hundred 22 tens 0 = 8 thousand 18 hundred 2 tens 0 = 9 thousand 8 hundred 2 tens 0 = 9820

4523 1064 1768 2507 + 3254 4875 9545 + 1439 9885	1426 + 2035 + 4782 = 8243 2407 + 885 + 1646 = 4938 2046 + 3807 + 1682 = 7535 275 + 86 + 1000 + 5608 = 6969

367 402 684 742 396 176 + 176 + 427 + 453 461 4321 832 689 2687 5426 247 1754 1374 + 21 + 476	203 + 456 + 387 = ☐ 515 + 277 + 190 = ☐ 4560 + 3809 = ☐ 4523 + 4280 + 307 = ☐ 1460 + 3287 + 4789 = ☐ 245 + 378 + 469 + 3871 = ☐

Subtraction

65	6 tens 5	
– 41	– 4 tens 1	
24	2 tens 4	

766	7 hundred 6 tens 6	Here, 766 subtraction
– 423	– 4 hundred 2 tens 3	423 to be subtracted
343	3 hundred 4 tens 3	343 remainder
	= 343	

876 subtraction
– 514 to be subtracted
362 remainder

508 – 304
= 5 hundred 0 tens 8 – 3 hundred 0 tens 4
= 2 hundred 0 tens 4
= 204

Here, 508 subtraction
304 to be subtracted
204 remainder

857	735	1649	8765
– 613	– 214	– 317	– 4321
244	521	1332	4444

563 – 241 = 322
795 – 412 = 383
962 – 530 = 432

684 subtraction	897	Here, 897 _____
– 341 to be subtracted	– 435	435 _____
remainder		remainder _____

789 – 406 = ____, here, 789 subtraction, 406 , to be subtracted
remainder _____.

968 ? 510 = ____, here, subtraction _____ to be subtracted
_____, remainder

Subtract (with carrying)

53	5 tens 3
– 24	– 2 tens 4
29	2 tens 9
	= 29

The 3 the ones of subtraction is greater than the 4 in the ones of the number to be subtracted.

Explanation : 4 of ones to be subtracted is greater than 3 of ones of subtraction. So we cannot subtract 4 from 3. A bundle of tens of subtraction has been opened. In this there are 4 bundles of tens and 13 sticks. From these 2 bundles of tens and 4 sticks have been subtracted. Two bundles of tens and 9 sticks are left. That is 2 tens and 9.

86	8 tens 6	7 tens 16
– 46	– 4 tens 8	– 4 tens 8
38		3 tens 8
		=38

Tens	Ones
8 = 7 + 1	6
?	?
7	16
= 4	8
3	8

867	8 hundred 6 tens 7	7 hundred 15 tens 17
– 498	– 4 hundred 9 tens 8	– 4 hundred 9 tens 8
369		3 hundred 6 tens 9
		= 369

hundred	Tens	Ones
8 = 7 + 1	6 = 5+1	7
=	=	=
7	15	17
= 4	9	8
3	6	9

536	5 hundred 3 tens 6	4 hundred 12 tens 16
– 287	– 2 hundred 8 tens 7	– 2 hundred 8 tens 7
		2 hundred 4 tens 9
		= 249

635 – 478
= 6 hundred 3 tens 5 – 4 hundred 7 tens 8
= 5 hundred 12 tens 15-4 hundred 7 tens 8
= 1 hundred 5 t ens 7
= 157

G

Subtract

8 4 5
- 4 8 6
3 5 9

hundred	Tens	Ones
8 - 4 $^{+1}$	4 $^{+10}$ 8 $^{+1}$	5 $^{+10}$ 6
3	5	9

751- 267 = 484

804 - 619 = 185

7165 - 3076 =

4089

9 5 4 8
- 6 8 7 9
2 6 6 9

Thousand s	Hundred s	Tens	Ones
9 - 6 $^{+1}$	5 $^{+10}$ 8 $^{+1}$	4 $^{+10}$ 7 $^{+1}$	8 $^{+10}$ 9
2	6	6	9

9 1 0
- 4 2 1
4 8 9

7 2 0 5
- 4 8 1 9
2 3 8 6

7 4 6
- 2 8 7

6 0 1
- 4 0 5

8 3 2
- 4 3 6

850
- 451

2610
- 702

4050
- 3152

7120
- 4923

824 0
- 4546

9032
- 8136

635 - 246 = ☐

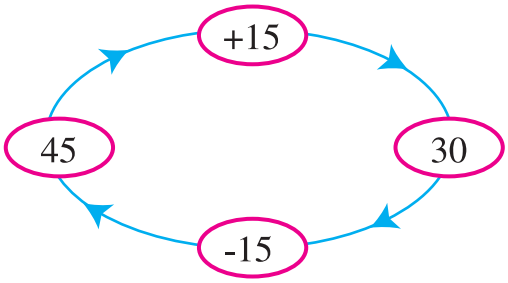
702 - 403 = ☐

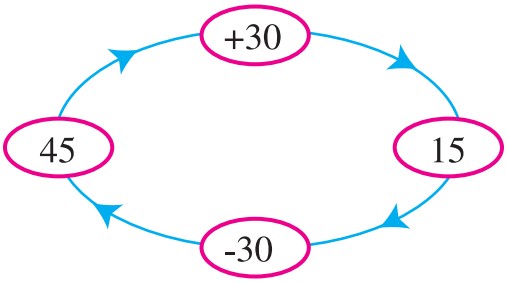
1242 - 553 = ☐

6104 - 5213 = ☐

8426 - 7439 = ☐

Relationship Between Addition and Subtraction





30 + 15 + 45
45 - 15 = 30

45 - 30 = 15
15 + 30 = 45

Subtraction is opposite to addition

36 + 10 = 46
46 - 10 = 36
46 - 36 = 10

36 - 9 = 27
36 - 27 = 9
27 + 9 = 36

45 + 15 = 60
60 - ☐ = 45
60 - ☐ = 15

65 + 22 = 87
☐ - 65 = 22
87 - 22 = ☐

77 - ☐ = 54
54 + 23 = ☐
☐ - 54 = 23

88 + 12 = ☐
100 - 88 = ☐
☐ - 12 = 88

Exercise- 2

1. Add :

a. $\begin{array}{r} 44 \\ +\ 22 \\ \hline \end{array}$

b. $\begin{array}{r} 302 \\ +\ 546 \\ \hline \end{array}$

c. $\begin{array}{r} 210 \\ 467 \\ +\ 322 \\ \hline \end{array}$

d. $\begin{array}{r} 1504 \\ 3021 \\ 4200 \\ +\ 164 \\ \hline \end{array}$

e. $\begin{array}{r} 367 \\ 476 \end{array}$

f $\begin{array}{r} 478 \\ 305 \\ +\ 530 \\ \hline \end{array}$

g. $\begin{array}{r} 210 \\ 657 \\ 756 \\ +\ 675 \\ \hline \end{array}$

h. $\begin{array}{r} 1504 \\ 1876 \\ 3718 \\ +\ 2680 \\ \hline \end{array}$

2. Add :

a. $61 + 16 =$ ☐

b. $326 + 602 =$ ☐

c. $456 + 546 =$ ☐

d. $376 + 673 + 763 =$ ☐

e. $2561 + 1562 + 3578 =$ ☐

f. $4678 + 467 + 2784 + 1648 =$ ☐

3. Subtract :

a. $\begin{array}{r} 968 \\ -\ 426 \\ \hline \end{array}$

b. $\begin{array}{r} 7562 \\ -\ 340 \\ \hline \end{array}$

c. $\begin{array}{r} 6894 \\ -\ 4102 \\ \hline \end{array}$

d. $\begin{array}{r} 702 \\ -\ 304 \\ \hline \end{array}$

e. $\begin{array}{r} 9120 \\ -\ 571 \\ \hline \end{array}$

f. $\begin{array}{r} 6147 \\ -\ 5658 \\ \hline \end{array}$

4. Subtract :

a. $675 - 41 =$ ☐

b. $9786 - 6120 =$ ☐

c. $714 - 316 =$ ☐

d. $8001 - 7016 =$ ☐

e. $8342 - 506 =$ ☐

f. $7124 - 6125 =$ ☐

5. Subtract and fill in the boxes :

a. 820
- 731

Here, Subtraction ☐
To be subtracted ☐
Difference ☐

b. 1604
- 708

Here, Remainder ☐
Subtraction ☐
To be subtracted ☐

c. 482- 183 = ☐

Here, Remainder ☐
Subtraction ☐
To be subtracted ☐

6. Write subtraction, remainder and the number to be subtracted in the boxes.

a. 840 - 651 = 189

Here, 189 ☐
840 ☐
651 ☐

b. 2041
- 1832
209

Here, 2041 ☐
209 ☐
1832 ☐

7. Fill in the boxes :

a. 53 + 27 = ☐
80 - 27 = ☐
80 - 53 = ☐

b. 88 - 19 = ☐
☐ + 69 = 88
88 - ☐ = 19

c. 64 + ☐ = 92
☐ - 64 = 28
92 - ☐ = 64

d. 125 + 75 = ☐
☐ - 75 = 125
200 - ☐ = 75

Problems Addition and Subtraction

Example 1. In Mithapukur school, there were 365 learners, 125 more students were admitted in the school. How many students are there altogether now?

Solution :

Number of learners	365
(Number of new students admitted)	+125
∴ Total learners	490

Answer : 490

Example 2. Zinia Begum's monthly income is Tk 7650. Her monthly expense is Tk 6700. How much is her monthly savings?

Solution :

Monthly income	Tk	7650
Monthly expense	Tk	6700
∴ Monthly savings	Tk	950

Answer : Monthly savings Tk 950

Example 2. Seema has Tk 575. Reema has Tk 190 less than Seema. If the taka of the two is put together, it equals to Neepa's taka. How much taka does Neepa have?

Solution : Seema has Tk 575

Reema has Tk 190 less than Seema

∴ Reema has (575-190) taka = 385 taka

∴ Neepa has (575+385) taka = 960 taka

Answer Tk. 960

Example 4. Mr. Selim went to market with Tk 525. He bought fish for Tk 150, oil for Tk 90 and vegetables for Tk 75. How much money was left with him?

Solution :

Fish	Tk	150	Had	Tk	525
Oil	Tk	90	Cost	Tk	315
Vegetables	Tk	75	Left	Tk	210
Total =	Tk	315			

Answer : Tk 210 remained with Mr. Selim.

Exercise - 3

1. In the annual examination, Deeba has got 85 marks in Bangla, 90 in mathematics and 80 in English. What is the total marks she got in three subjects ?
2. Mr. Abdul Halim bought rice at Tk 375, fish at Tk 175 and oil at TK 90. How much money did he spand altogether ?
3. Mita had Tk 175. She bought books at Tk 75 and Khata at Tk 35. How much taka was left with her ?
4. Daily income of Subol is Tk 275. His daily expense is Tk 180. How much taka does he save everyday?
5. Ziku has Tk 271 and Piku has Tk 108. If the taka of the two is put together, then it equals to the taka of Tiku. How much taka do the three have altogether?
6. Tk 3000 is needed for the picnic of the students of class Three, Four and Five. Tk 1055 and Tk 1200 have been collected from the class Four and Five respectively. How much taka will have to be collected from class Three ?
7. What should be added to 476 to get 900?
8. Mr. Kamal needs Tk 9175 for repairing his house. He sold jute for Tk 1225, cow for Tk 5025 and goat for Tk 1900. How much more does he need?
9. Sujon has Tk 975. Sumon has Tk 688. How much taka does need to equal the taka of Sujon?
10. In a nursery, there were 805 saplings. 617 saplings were sold. 575 more saplings were brought in that nursery. How many saplings are there now ?

11. What should be subtracted from 917 to get 409 ?

12. The sum of two numbers is 1475. One of them is 986. What is the other number?

13. The daughter is 16 years old and the father is 47 years old. What will be their total age after 12 years ?

14. In a school, there are 1275 seats. How many seats should be arranged for 1326 students ?

15. A man went to market for Eid shopping with Tk 2025. After returning home, he found that he had Tk 627 with him. How much taka did he spend ?

16. In your school, there were 321 students. 75 students have dropped out. 109 fresh students were admitted. How many students are there in your school now?

17. The population of Rasulpur village is 5781. The number of male is 2985. What is the number of female?

18. The difference between the two numbers is 1013. The greater number is 2104; What is the smaller number?

19. In a train, the number of seats is 1575. In two days tickets were sold for 509 and 425 seats. Tickets for how many seats were not sold?

20. In a garden, there are 179 mango trees. In that garden, there are 30 more jackfruit trees than mango trees. How many trees are there in the garden in all?

Multiplication

4 4 4 12

4 + 4 + 4 = 12 4 x 3 = 12

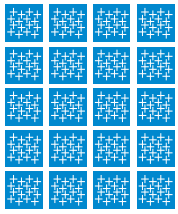
4, 3 times equal 12

3 3 3 3 12

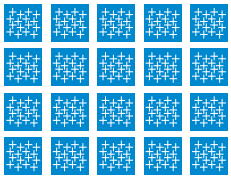
3 + 3 + 3 + 3 = 12 3 x 4 = 12

3, 4 times equal 12

∴ 4 x 3 = 3 x 4 = 12



4 x 5 = 20



5 x 4 = 20

Fill in the boxes (One is done for you)

7 x 5 = 5 x 7 =	35	7 x 8 = 8 x 7 =	
4 x 9 = 9 x 4 =		6 x 8 = 8 x 6 =	
5 x 8 = 8 x 5 =		7 x 9 = 9 x 7 =	
9 x 6 = 6 x 9 =		5 x 6 = 6 x 5 =	

Fill in the boxes

x	1	2	3	4	5	6	7	8	9	10
1					5				9	
2			6				14			
3		6				18				30
4			12						36	
5	5						35			
6		12								60
7				28		42				
8	8							64		
9				36					81	
10					50					100

Multiplication table (From 11 to 20)

X	1	2	3	4	5	6	7	8	9	10
11	11	22	33	44	55	66	77	88	99	110
12	12	24	36	48	60	72	84	96	108	120
13	13	26	39	52	65	78	91	104	117	130
14	14	28	42	56	70	84	98	112	126	140
15	15	30	45	60	75	90	105	120	135	150
16	16	32	48	64	80	96	112	128	144	160
17	17	34	51	68	85	102	119	136	153	170
18	18	36	54	72	90	108	126	144	162	180
19	19	38	57	76	95	114	133	152	171	190
20	20	40	60	80	100	120	140	160	180	200

Fill in the boxes

13 x 1	13 x 2	13 x 3	13 x 4	13 x 5	13 x 6	13 x 7	13 x 8	13 x 9	13 x 10
15 x 1	15 x 2	15 x 3	15 x 4	15 x 5	15 x 6	15 x 7	15 x 8	15 x 9	15 x 10
17 x 1	17 x 2	17 x 3	17 x 4	17 x 5	17 x 6	17 x 7	17 x 8	17 x 9	17 x 10
18 x 1	18 x 2	18 x 3	18 x 4	18 x 5	18 x 6	18 x 7	18 x 8	18 x 9	18 x 10

Fill in the boxes with the help of multiplication table

x	1	2	3	4	5	6	7	8	9	10
11					55			88		
14			42				98			
16	16					96				160
19		38							171	
20			60					160		

Multiplicaton

Exmple 1. 43 Explanation :

$$\begin{array}{r} 43 \\ \times\ 3 \\ \hline 129 \end{array}$$

4 3 x 3

3 x 3 = 9 = 9

4 tens x 3 = 12 tens = 120

129

Answer : 129

Exmple 2. 28 Explanation :

$$\begin{array}{r} 28 \\ \times\ 7 \\ \hline 196 \end{array}$$

2 8 x 7

8 x 7 = 56 = 56

2 tens x 7 = 14 tens = 140

196

Answer : 196

Exmple 3. 213 Explanation :

$$\begin{array}{r} 213 \\ \times\ 3 \\ \hline 639 \end{array}$$

2 1 3 x 3

3 x 3 = 9 = 9

1 ten x 3 = 3 tens = 30

2 hundred 3 = 6 hundred = 600

639

Answer : 639

Exmple 4. 683 Explanation :

$$\begin{array}{r} 683 \\ \times\ 9 \\ \hline 6147 \end{array}$$

6 8 3 x 9

3 x 9 = 27 = 27

8 tens x 9 = 72 tens = 720

6 hundred 9 = 54 hundred = 5400

6147

Answer : 6147

Multiplication through a short-cut method

Example 5. 13 x 10 = 13 x 1 tens = 13 tens = 130 ∴ 13 x 10 = 130 Answer : 130	Example 6. 57 x 20 = 57 x 2 tens = 114 tens = 1140 ∴ 57 x 20 = 1140 Answer : 1140s
Example 7. 135 x 30 = 135 3 tens = 405 tens = 4050 ∴ 135 x 30 = 4050 Answer : 4050	Example 8. 340 x 50 = 340 x 5 tens = 1700 tens = 17000 ∴ 340 x 50 = 17000 Answer : 17000
Example 9. 82 x 100 = 82 x 1 hundred = 82 hundred = 8200 ∴ 82 x 100 = 8200 Answer : 8200	Example 10. 100 x 100 = 100 x 1 hundred = 100 hundred = 10000 ∴ 100 x 100 = 10000 Answer : 10000

Example 11. Multiply : Explanation :

$$\begin{array}{r} 34 \\ \times\ 12 \\ \hline \end{array}$$

34 → 4 = 4; 3 tens = 30

12 → 2 = 2; 1 tens = 10

Solution :

$$\begin{array}{r} 34 \\ \times\ 12 \\ \hline 68 \\ 340 \\ \hline 408 \end{array}$$

Now, 34×2

$4 \times 2 = 8$

$30 \times 2 = 60$

68

34×10

$4 \times 10 = 40$

$30 \times 10 = 300$

340

$\therefore\ 34 \quad 2 = 68$

$34 \quad 10 = 340$

$34 \quad 12 = 408$

Answer : 408

Example 12. Multiply : Explanation :

$$\begin{array}{r} 273 \\ \times\ 29 \\ \hline \end{array}$$

273 → 3 ones = 3; 7 tens = 70; 2 hundred = 200

29 → 9 ones = 9; 2 tens = 20

Solution :

$$\begin{array}{r} 273 \\ \times\ 29 \\ \hline 2457 \\ 5460 \\ \hline 7917 \end{array}$$

Now, 273×9

$3 \times 9 = 27$

$70 \times 9 = 630$

$200 \times 9 = 1800$

2457

And, 273×20

$3 \times 20 = 60$

$70 \times 20 = 1400$

$200 \times 20 = 4000$

5460

$\therefore\ 273 \times 9 = 2457$

$273 \times 20 = 5460$

$273 \times 29 = 7917$

Answer : 7917

Comments : The learners will multiply through the usual method, beyond this no explanation will be sought from them.

Example 13. Multiply : 370 x18

Solution :
$$\begin{array}{r} 370 \\ \times 18 \\ \hline 2960 \\ 3700 \\ \hline 6660 \end{array}$$

Answer : 6660

Example 14. Multiply : 209 x46

Solution :
$$\begin{array}{r} 209 \\ \times 46 \\ \hline 1254 \\ 8360 \\ \hline 9614 \end{array}$$

Answer : 9614

Example 15. There are 25 pieces of chalks in a box. How many pieces of chalks are there in 15 boxes?

Solution :
$$\begin{array}{r} 25 \\ \times 15 \\ \hline 125 \\ 250 \\ \hline 375 \end{array}$$

Answer : 375

Example 16. There are 35 pages in a book. How many pages are there in 16 books?

Solution :
$$\begin{array}{r} 35 \\ \times 16 \\ \hline 210 \\ 350 \\ \hline 560 \end{array}$$

Answer : 560

Multiplicand, Multiplier and the Product

$12 \times 8 = 96$ Here, 12 what is multiplicand, 8 is multiplier and 96 is the product of multiplication.

24	Here,		15	Here,	
$\times 15$	multiplicand	24	$\times 24$	24	multiplier
120			60		
240	multiplier	15	300	15	multiplicand
360	Product of multiplication	360	360		
				360	Product of multiplication

In Multiplication between the two numbers :

- The number which is multiplied is called multiplicand.
- The number which multiplies is called multiplier.
- The answer is called the product of multiplication.

Fill in the empty boxes :

$7 \times 9 = 63$ Here,

multiplicand ☐ ; multiplier ☐ ; product ☐

$13 \times 6 = 78$ Here,

multiplicand ☐ ; multiplier ☐ ; product ☐

59	Here, 472	☐	65	Here	multiplicand ☐
$\times 8$	59	☐	$\times 9$		multiplier ☐
472	8	☐	585		a whole number ☐

$3 \times 8 = 24$; $8\ \ 3 = 24$ $\therefore\ 3 \times 8 = 8\ \ 3$

$6 \times 7 = 42$; $7\ \ 6 = 42$ $\therefore\ 6 \times 7 = 7\ \ 6$

$13 \times 9 = 117$; $9\ \ 13 = 117$ $\therefore\ 13 \times 9 = 9\ \ 13$

Note : The product remains the same in exchange of the place of multiplicand and multiplier.

Exercise - 4

1. Fill in the leoxes :

   a. $6 \times 9 =$ ☐ b. $8 \times$ ☐ $= 72$

   c. $15 \times 7 =$ ☐ d. $12 \times 5 =$ ☐

   e. $18 \times$ ☐ $= 108$ f. ☐ $\times 9 = 171$

   g. $53 \times 16 = 848$ Here, multiplier ☐ ;

   multiplicand ☐ ; product ☐ .

2. Work out the product :

a. 65×4	b. 46×7	c. 71×9
d. 97×8	e. 88×6	f. 234×4
g. 532×8	h. 406×9	i. 728×9
j. 876×5	k. 936×7	l. 999×8

3. Find out product through short –cut method :

a. 61×10	b. 43×20	c. 36×50
d. 24×100	e. 387×10	f. 250×20
g. 187×30	h. 67×50	i. 100×100

4. Find out the product :

a. 327 × 9	b. 910 × 5	c. 849 × 9	d. 65 × 25
e. 48 × 27	f. 98 × 65	g. 99 × 87	h. 325 × 14
i. 148 × 47	j. 309 × 32	k. 230 × 28	l. 408 × 19

5. There are 45 lozenges in a packet. How many lozenges are there in 12 packets?

6. A car goes 54 kilometers in on hour. How many kilometers will it go in 15 hours at the same speed?

7. Halima Khatun earns Tk 125 daily by sewing. How many Tk does she earn in 15 days?

8. There are 104 pages in a book. How many pages are there altogether in 25 books?

9. The age of Apu's grandfather is nine times of Apu's age. If Apu's age is 9 years, what is the age of his grandfather?

10. Tuli sleeps for 7 hours daily. How many hours will she sleep in a month? (1 month = 30 days)

11. A truck contains 40 large bags of rice. How many bags of rice will be there 6 trucks?

12. The amount of Anu's taka is nine times of Minu's taka. If Minu has Tk 88, how many taka does Anu have ?

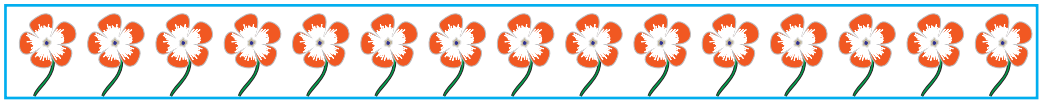
13. The price of a goose is Tk 88. What is the price of 25 geese?

14. There are 28 trees in a row of a garden. How many trees are there in 17 rows in that garden?

15. There are 112 guavas in a basket. How many guavas are there altogether in 19 baskets?

Division

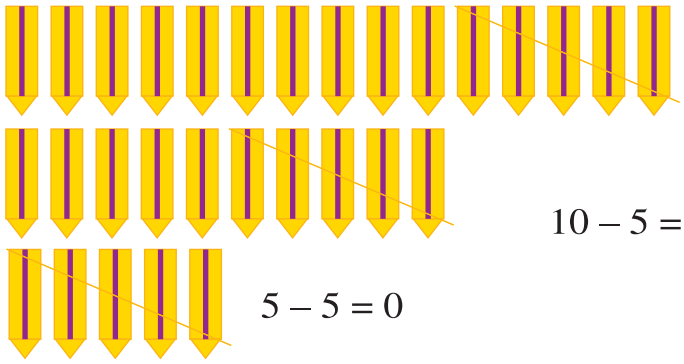
Ideas about division



15

5 5 5

$15 \div 3 = 5$



$15 - 5 = 10$

$10 - 5 = 5$

$5 - 5 = 0$

Let us notice : If 5 pencils are taken away each time from 15 pencils, it can be taken away 3 times.

* Division means repeated method of substraction.

$63 \div 9$ = What ? $9 \times$ What ? $= 63$ $9 \times 7 = 63$ $\therefore 63 \div 9 = 7$	$9 \overline{)63} \; 7$ $\underline{63}$ 0
$35 \div 5 =$ ☐ $54 \div 6 =$ ☐ $48 \div 8 =$ ☐ $81 \div 9 =$ ☐	$7 \overline{)49}$ ($8 \overline{)72}$ ($4 \overline{)32}$ (

Dividend, Divisor, Quotient and Remainder

28 ÷ 4 = 7
Dividend Divisor Quotient

Dividend ÷ Divisor = Quotient

28 = 4 x 7

Dividend = Divisor x Quotient

Divison is the opposite method of multiplication

```
8 ) 149 ( 18
    8
   69
   64
    5
```

Here, 149 Dividend
8 Divisor
18 Quotient
5 Remainder

∴ 149 = 8 x 18 + 5 That is, Dividend = Divisor x Quotient + Ramainder

Fill in the boxes :

35 ÷ 5 = 7

Here, Divisor ☐
Dividend ☐
Quotient ☐

```
6 ) 80 ( 13
   6
  20
  18
   2
```

Here,
Divisor ☐
Dividend ☐
Quotient ☐
Remainder ☐

Note:

- The number which divides is called the divisor.
- The number which is divided is called the dividend.
- The number that we get after dividing is the quotient.
- The number which remains after the division is called the remainder; remainder must be smaller than the divisior.
- If the remainder is zero, then dividend is thoroughly divisible by the divisor.

$5 \div 5 =$ What ? $5 \times$ What ? $= 5$ $5 \times 1 = 5$ $\therefore\ 5 \div 5 = 1$ 5) 5 (1 5 0	$9 \div 1 =$ What ? What ? $\times 9 = 9$ $1 \times 9 = 9$ $\therefore 9 \times 1 = 9$ 1) 9 (9 9 0
$0 \div 2 = 0$ 2) 0 (0 0 0	$0 \div 5 = 0$ 5) 0 (0 0 0

$5 \div 0$ = There is no number.

A number cannot be divided by zero (0). For this reason divisor cannot be zero (0) in any situation.

Let us notice :

- When divisor and dividend is equal, quotient is 1.
- When divisor is one, quotient equals to the dividend.
- When divisor is 0, quot ient is also 0.
- When divisor is 0 we cannot divide, for this reason divisor cannot be 0 in any situation

Fill in the boxes (Two are done for you)

Dividend	42	55	25	78	85	61	0	95	17	0
Divisor	6	9	4	5	8	7	7	9	3	3
Quotient	7					8				
Remainder	0					5				

Division

Example 1. Divide 336 by 3

Solution : 3) 336 (112
3
3
3
6
6
0

Explanation : 336 = 3 hundreds 3 tens 6
3) 3 hundreds 3 tens 6 (1hundred 1tens2
3 hundreds
3 tens
3 tens
6
6
0

Answer : Quotient 112

Example 2. Divide 371 by 7.

Solution : 7) 371 (53
35
21
21
0

Explanation : 371 = 3 hundreds 7 tens 1
= 37 tens 1

7) 37 tens 1 (5 tens 3
35 tens
21
21
0

Answer : Quotient 53

Note: 3 of the hundred of the dividend is smaller than divisor 7. So, 37 tens has been taken by putting together the numbers of the hundreds and tens columns.

Example 3. Divide 279 by 6

Explanation : 279 = 27 tens 9

Sotution : 6) 279 (46

24

39

36

3

6) 27 tens 9 (4 tens 6

24 tens

39

36

3

Answer : Quotient 46, Remainder 3.

Comment : The learners will do the sum of division in the usual method. No explanation will be sought from them beyond this.

Example 4. Divide 509 by 7

Solution : 7) 509 (72

49

19

14

5

Answer : Quotient 72, Remainder 5

Example5. Divide 660 by 6

Solution : 6) 660 (110

6

6

6

0

Answer : Quotient 110

Example 6. The price of 8 khata is Tk. 88.
What is the price of each book?

Solution : 8) 88 (11

8

8

8

0

Answer : Tk 11

Example 7. 4 items make a Hali. How many will be in 60 bananas?

Solution : 4) 60 (15

4

20

20

0

Answer : 15 groups of four

Exercise - 5

1. Divide :

a. 63÷ 3	b. 84÷ 4	c. 330÷ 3	d. 242÷2
e. 126÷ 6	f. 550 ÷5	g. 404÷4	h. 567÷9
i. 800÷9	j. 428 ÷4	k. 931÷8	e. 948÷6

2. Fill in the boxes :

a. 28 ÷ 4 = 7 here, 4 ☐ , 28 ☐ , 7

b. 7 ÷1 = 7 here, dividend and ☐ are equal.

c. 5 ÷ 5 = 1 here, quotient ☐ and ☐ and ☐ are equal.

d. 8) 325 (40 here, quotient ☐ , remainder ☐ .

32

5

3. How many parts of 2 metre each, can be taken away from a 36 metre long stick?

4. A bus goes 92 kilometres in 4 hours. How many kilometres does the bus go in every hour?

5. There are 40 students in a class. How many benches will be needed if 5 students seat in each beanch?

6. The price of a pencil is Tk 4. How many pencils can be bought for Tk 96?

7. The price of 9 pens is Tk 99. What is the price of each pen?

Solution to problems

(Related to addition, Subtraction, Multiplication and division)

Example 1. In a school there are 15 boxes of chalks. There are 15 chalks in each box. Except these, there are 25 more pieces chalks. How many piees of chalks are there altogether in that school?

Solution : There are 50 pieces chalks in a box

Number of chalks in 15 boxes are (50×15)

Now,
$$\begin{array}{r} 50 \\ \times\ 15 \\ \hline 250 \\ 500 \\ \hline 750 \end{array}$$

$$\begin{array}{r} 750 \\ +\ 25 \\ \hline \text{total chalks are } 775 \end{array}$$

Answer: 775

Example 2. Rakib collects Tk 60 per month. He gives Rani Tk 85 from his collection of 12 months. How much money is left with him?

Solution : Collects Tk 60 in 1 month

Collects in 12 months (60 ×12) taka

Now,
$$\begin{array}{r} 60 \\ \times\ 12 \\ \hline 120 \\ 600 \\ \hline 720 \end{array}$$

$$\begin{array}{r} 720 \text{ taka} \\ -\ 85 \text{ taka} \\ \hline \text{Tk } 635 \text{ is left with Rakib} \end{array}$$

Answer : 635 taka

Example 3. There are 50 lozenges in a packet. From these, 8 lozenges are kept. The remaining lozenges are distributed equally among 7 people. How many lozenges does each one get?

Solution : The number of lozenges minus 8 : 50-8 = 42

Now, 42 lozenges are distributed among 7 people

$\therefore$ $42 \div 7 = 6$

$\therefore$ Each one gets 6 lozenges.

Answer : 6

Example 4. In a shelf there are 86 books. There are 94 books in another shelf. From these books if everyone is given 6 books then how many people can be given those books?

Solution :

The number of books in a shelf	86
The number of books in another shelf	94
Total books	180

Now, 6) 180 (30

18

0

0

0

$\therefore$ 30 people can be given.

Answer : 30 people.

Example 5. Of four students, every student has 25 lozenges. Lozenges of all are put together. After that the lozenges are distributed equally among 5 students. Now how many lozenges does each one get.

Solution :

$$\begin{array}{r} 25 \\ \times\ 4 \\ \hline 100 \end{array}$$

∴ There are 100 lozenges in all.

Now,

$$\begin{array}{r} 5\ )\ 100\ (\ 20 \\ 10 \\ \hline 0 \\ 0 \\ \hline 0 \end{array}$$

∴ Each one gets 20 lozenges.

Answer : 20

Example 6. Moni's father divided 99 lichies equally in three parts. He gave two parts to Moni. How many lichies did Moni get

Solution :

$$\begin{array}{r} 3\ )\ 99\ (\ 33 \\ 9 \\ \hline 9 \\ 9 \\ \hline 0 \end{array}$$

∴ In one part there are 33 lichies

Moni got two parts

Now,

$$\begin{array}{r} 33 \\ \times\ 2 \\ \hline 66 \end{array}$$

∴ Moni got 66 lichies

Answer : 66

Exercise – 6

1. There are 42 students in a class. Each one gave subsciption of Tk 7. How much money was collected as subscription in all ?

2. There are 45 mangoes in a basket. How many mangoes are there in such 12 baskets ?

3. In a class there are 45 students. 5 students can sit in each bench. How many benches will be needed that class?

4. A 36 metre long ribbon is divided into 9 parts equally. How many metre is in each part?

5. There are 12 benches in a class. 5 girl students can be seated in each of the 8 benches. 6 students can be seated in each of the remaining 4 benches. How many students can be seated altogether in 12 benches ?

6. The price of a shirt is Tk 75. The price ofa pant is Tk 120. How much money will be needed to buy 25 shirts and 6 pants ?

7. The price of a ball point pen and six khatas is Tk 77 together. The price of a khata is Tk 12. What is the price of a ball point pen ?

8. There should be 82 bananas in a cluster. Bananas of such 8 cluster are counted. After counting 15 bananas are found less. How many bananas were there in the clusters?

9. There are 35 mangoes in a basket. There are 37 mangoes in another basket. By putting together the mangoes of the two baskets are distributed among 9 persons. How many mangoes does each person get ?

10. Sumi bought a packet of 40 lozenges. She kept side 5 lozenges from the packet. She distributed the remaining lozenges equally among her 5 friends. How many lozenges did each friend of Sumi get ?

11. Rana has Tk 99. He gave one ninth of that money to Chabi. How many taka is now left with Rana?

12. 6 parts out of 8 parts of a 88 metre long ribbon are given to Shahana. How many metres does Shahana get ?

13. Each of 25 women gave Tk 75 as subscription. By putting this subscription together, it was distributed equally among 15 flood affected people. How many takas did each get ?

14. Father's present age is 3 times than that of the son. 5 years ago the son's age was 8. What is the father's present age ?

15. Mr. Kalam sold 7 basket of mangoes at the rate of Tk 75 per basket. He bought a shirt for Tk 98. He deposited the remaining taka at a bank. How many takas did he deposit at the bank ?

16. A car starts from Monohordy at 6 a.m. The car reaches Hobiganj at 12 p.m without stopping anywhere. If the car goes 45 kilometre per hour, then what is the distance from Monohordy to Hobiganj ?

Mathematical Signs

Mathematical method sign

"Three plus two" is written, 3+2. Here, 3 and 2 is number sign and the + sign is sign of addition method, which is in brief called addition sign. Mathematical method signs are :

+	Addition
–	Subtraction
x	Multiplication
÷	Division

Express using sign (one is done for you) :

One hundred twenty plus twenty five	120 + 25
Three hundred minus one hundred three	
Four hundred multiplied by twelve	
Two hundred fifty divided by twenty five	

Relation sign

Relation signs between two numbers are :

Example : (a) $3 + 2 = 5$

(b) $9 - 3 > 4$

(c) $10 \div 5 < 3$

=	Equal
>	Greater
<	Smaller

Express using mathematical relation sign :

Four hundred ninety nine is smaller than five hundred	499 < 500
Six thousand twelve is greater than five thousand	6012 > 500

☐ put appropriate mathematical method sign (+, -, x, ÷) in the box.

(Two have been done for you)

145 ☐ 15 = 160	145 [+] 15 = 160
655 ☐ 500 = 155	
250 ☐ 3 = 750	250 [x] 3 = 750
715 ☐ 25 = 740	
830 ☐ 5 = 166	
125 ☐ 12 = 1500	
873 ☐ 6 = 867	

Example : ☐ put appropriate relation sign (>, = ,<) in the box :

(a) 250 + 30 ☐ 30 + 250

(b) 250 x 3 ☐ 3 x 250

(c) 250 - 3 ☐ 230

(d) 250 x 3 ☐ 650

(e) 250 ÷5 ☐ 55

Solution :

a. 250 + 30 = 280

Again, 30 + 250 = 280

So, 250 + 30 = 30 + 250

Answer : 250 +30 [=] + 30 + 250

c. 250 – 30 = 220

Here, 220 < 230

Answer : 250 – 30 [<] 230

e. 250 ÷ 5 = 50

Here, 50<55

Answer 250 ÷ 5 [<] 55

b. 250 x 3 = 750

Again, 3 x 250 = 750

So, 250 x 3 = 3 x 250

Answer: 250 x 3 [=] 3 x 250

d. 250 x 3 = 750

Here, 750 > 650

Answer : 250 x 3 [>] 650

Exercise - 7

1. Express using sign :

a. Two hundred fifty plus seventy.

b. One thousand one hundred and one plus one hundred three.

c. Four hundred seventy five minus three hundred seven.

d. Eight hundred ninety minus ninety.

e. Multiplication seven hundred forty five by fifteen ?

f. Two thousand nine hundred and seventy five minus two thousand seventy five.

g. Division of nine hundred ninety two by sixteen.

h. Add twenty four with three times of eight.

2. Express using Mathematical sign :

a. Eight hundred eighty is smaller than eight hundred ninety.

b. Eight thousand forty five is smaller than eight thousand five hundred

c. Four thousand is greater than three thousand seven hundred and twenty.

d. Ten thousand is greater than nine thousand nine hundred and ninety.

3. ☐ put applicable sign (+, -, x,÷) in the box :

a.	250	☐	60	=	310
b.	150	☐	6	=	900
c.	350	☐	40	=	310
d.	840	☐	2	=	838
e.	999	☐	11	=	1010
f.	660	☐	0	=	0
g.	783	☐	3	=	261
h.	270	☐	5	=	1350
i.	830	☐	0	=	830

4. ☐ put applicable sign (>, = ,<) in the box:

a.	275 + 85	☐	400
b.	275 + 75	☐	300
c.	807 + 700	☐	1000
d.	999 + 111	☐	10000
e.	1209 – 1200	☐	10
f.	875 – 0	☐	875
g.	720 – 700	☐	20
h.	920 × 3	☐	2700
i.	920 × 3	☐	2760
j.	920 × 3	☐	2600
k.	265 ÷ 5	☐	53
l.	265 ÷ 5	☐	50
m.	265 ÷ 5	☐	61
n.	126 ÷ 9	☐	11

5. Express with the help of mathematical sign :

a. When 64 is divided by 8, then the quotient is 8.

b. When 50 is multiplied by o, then equal to the product of multiplication.

c. When 43 is added with 17, then the sumis greater than 45.

d. When 43 is added with 17, then the sumis equal to 60.

e. 3 times of 35 is greater than 100.

f. When 120 is divided by 8, then quotient is smaller than 16.

Bangladeshi Coin and Note

					
1 paisa	5 paisa	10 paisa	25 paisa	50 paisa	50 paisa
					
1 Taka	1 Taka	1 Taka	2 Taka	2 Taka	2 Taka
					
5 Taka	5 Taka	5 Taka	10 Taka	10 Taka	

Bangladeshi note

20 Taka

20 Taka

50 Taka

50 Taka

100 Taka

100 Taka

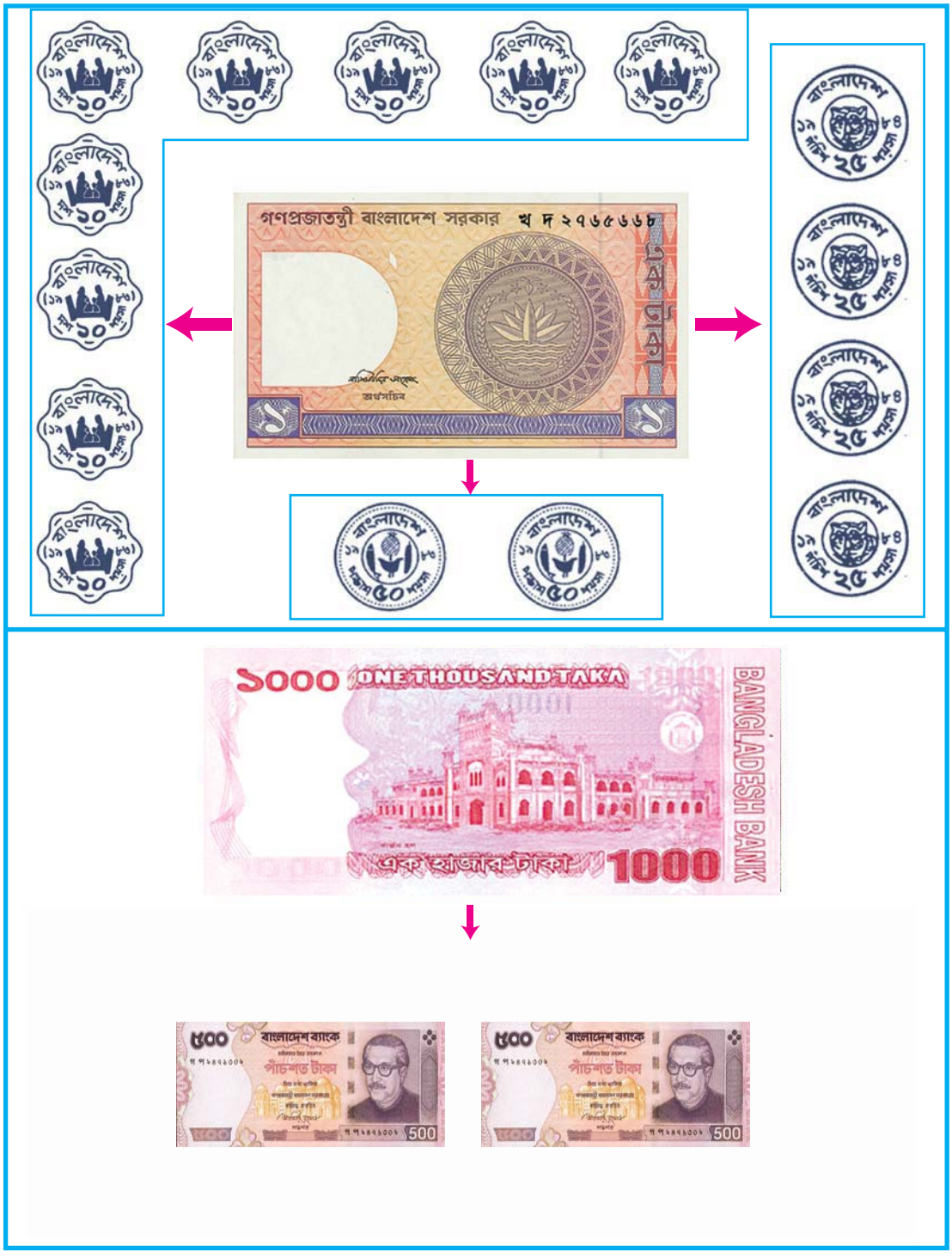
500 Taka

500 Taka

1000 Taka

1000 Taka

Bangladeshi Coin and Note



Bangladeshi Note

5 coins of 5 paisa coin is equal to 25 paisa

5 coins of 10 paisa coin is equal to 50 paisa

4 coins of 25 paisa coin is equal to 1 Taka

2 coins of 50 paisa coain is equal to 1 Taka

5 coins of 10 paisa coin is equal to 1 Taka

5 coins of 10 paisa coin and 1 nos of 25 paisa coin is equal to 75 paisa.

2 coins of Twenty five paisa and 50 paisa coin is equal to 1 Taka

4 coins of 5 Taka is equal to 20 Taka.

10 coins of 50 Taka is equal to 500 Taka.

3 coins of 10 Taka and 1 nos of 20 Taka is equal to 50 Taka

20 coins of 5 Taka is equal to 100 Taka

8 coins of 50 Taka and 1 nos of 100 Taka is equal to 500 Taka.

1 nos of 500 Taka and 5 nos of 100 Taka is equal to 1000 Taka.

Fill in the boxes :

10 coins of ☐ is equal to 1 Taka

5 paisa's of ☐ nos coin is equal to 1 Taka

4 nos ☐ paisa coin and ☐ nos 10 paisa coin is equal to 50 paisa.

20 nos of 5 Taka note is equal to ☐ Taka

10 Taka's ☐ nos note is equal to 100 Taka

100 Taka's ☐ nos note is equal to 500 Taka

20 Taka's ☐ nos note is equal to 500 Taka

100 Taka's ☐ nos not is equal to 1000 Taka.

Writing Mathod of Taka-Paisa

1 paisa = 0.01 Taka	75 paisa = 0 .75 Taka
2 paisa = 0.02 Taka	80 paisa = 0.80 Taka
5 paisa = 0.05 Taka	99 paisa = 0.99 Taka
8 paisa = 0.08 Taka	100 paisa = 1.00 Taka
10 paisa = 0.10 Taka	1 Taka 25 paisa = 1.25 Taka
15 paisa = 0.15 Taka	1 Taka 80 paisa = 1.80 Taka
20 paisa = 0.20 Taka	90 Taka 8 paisa = 90.08 Taka
30 paisa = 0.30 Taka	100 Taka = 100.00 Taka
50 paisa = 0.50 Taka	100 Taka 5 paisa = 100.05 Taka

Write in number (one is done for you)

Twenty two Taka nine paisa = 22.09	Eighteen Taka Ninety paisa = ____ Taka
Five Taka Five paisa = ____ Taka	Twenty Five Taka = ____ Taka Seventy five paisa
Ten Taka eight paisa = ____ Taka	Two hundred sixty five Taka ten paisa = ____ Taka
Nineteen Taka = ____ Taka	Five hundred Taka Seventy five paisa = ____ Taka

Write in words (one is done for you) :

3.23 Taka = Three Taka twenty three paisa

5.02 Taka = ____

75.09 Taka = ____

501.90 Taka = ____

Example 1. What is the total of 60 paisa, 25 paisa and 15 paisa ?

Solution :
60 paisa
25 paisa
15 paisa
Total : 100 paisa

100 paisa = 1.00 Taka
= 1 Taka

Ans : 1 Taka

Example 2. How much taka do we get by adding 2 nos of 25 paisa coin, 4 nos 0f 10 paisa coin and 3 nos of 5 paisa coin?

Salution : 2 nos of 25 paisa coin = 25 paisa × 2 = 50 paisa
4 nos of 10 paisa coin = 10 paisa × 4 = 40 paisa
3 nos of 5 paisa coin = 5 paisa × 3 = 15 paisa
Total = 105 paisa
= 1 .05 Taka

Ans : 1.05 Taka

Example 3. Add :

a.	(b)	(c)
47 Taka 20 paisa	85.25 Taka	8.40 Taka
+ 28 Taka 50 paisa	+ 63.10 Taka	25.75 Taka
75 Taka 70 paisa	148.35 Taka	+47.15 Taka
		81.30 Taka
Ans : 75 Taka 70 paisa	Ans : 148.35 Taka	Ans : 81.30 Taka

Example 4. Subtract :

a.	(b)	(c)
97 Taka 50 paisa	38.75Taka	60.00 Taka
−25 Taka 25 paisa	−26.20 Taka	−35.40 Taka
72 Taka 25 paisa	12.55 Taka	24.60 Taka
Ans : 72 Taka 25 paisa	Ans : 12.55 Taka	Ans : 24.60 Taka

Example 5 Rubi had Tk 50.75. Her father gave her Tk 80 for buy to books. How much Taka does she have now?

Solution :

Rubi had		Tk 50.75
Her father gave her	+	Tk 80.00
Total		Tk 130.75

Answer : Tk 130.75

Example 6 : Ajoy bought some fishes at Tk 57.50 from the market. He gave Tk 100 to the fishseller. How much money the fishseller will return?

Solution :

100.00 Taka
−57.50 Taka
42.50 Taka

Ans : 42.50 Taka

Example 7: The price of one goose is 100 Taka. The cost of one hen is 90.75 Taka. Raju bought one swan and one hen. He gave 500 Taka to the shopkeeper. How many takes will the shopkeeper return?

Solution :

The cost of goose	100.00 Taka	500.00 Taka
The cost of hen	90.75 Taka	−190.75 Taka
Total cost	190.75 Taka	309.25 Taka

Ans : 309.25 Taka

Exercise - 8

1. Write in number :

Seventy paisa, Nine paisa, Seven taka Three paisa, Eighty taka, One hundred Eighty seven taka ninety paisa, Ninety two taka seven paisa.

2. Write in words :

0.06 Taka, 309 Taka, 7.19 Taka, 299.99 Taka, 547.50 Taka

3. a. How much paisa will you get by adding 55 paisa, 15 paisa and 20 paisa ?

b. How much the total will be by adding 4 nos of 10 paisa coin,s and 6 nos of 5 paisa coin?

c. How much the total will be by adding 5 nos of 25 paisa coin and 6 nos of 5 paisa coin?

4. Add:

a. 45 Taka 50 paisa
+ 60 Taka 25 paisa

b. 57.08 Taka
+ 25.27 Taka

c. 526.27 Taka
+ 127. 28 Taka

d. 205.75 Taka
+ 25.08 Taka

e. 28.03 Taka
17.78 Taka
+ 2.25 Taka

f. 460.75 Taka
234.25 Taka
+ 83.50 Taka

5. Subtract :

a. 85 Taka 75 paisa
−16 Taka 50 paisa

b. 31.87 Taka
−15.25 Taka

c. 100.10 Taka
−71.38 Taka

6. Karim bought rice for Tk 17.50 and pulse for Tk 37.25. How much did he spend in total?

7. Titu bought 2 khatas at Tk 35.75. He gave a 50 Taka note to the shopkeeper. How much money will the shopkeeper return?

8. Babul bought a basket of mangoes. He gave one note of 50 Taka and 3 notes of 20 Taka to the mangoseller. What in the price of that basket of mango?

9. How much greater a note of 100 Taka is than a note of 20 Taka?

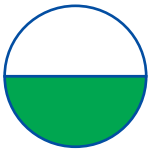
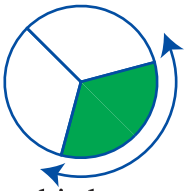
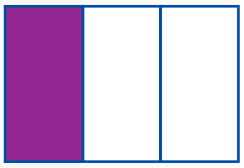
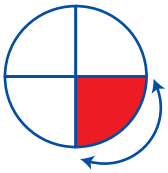
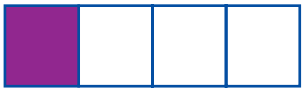
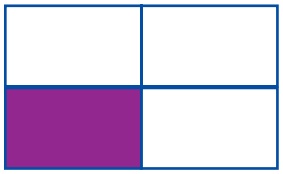
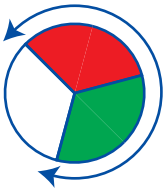
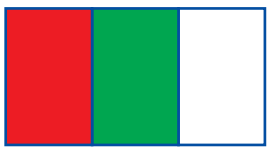
10. How much less is 1 note of 50 Taka than 1 note of 500 Taka?

11. The price of a khata is a Tk 15.50 and the price of a pen is Tk 10.00. If the shopkeeper is given a 50 taka note, how much will be return?

12. How much greater is 2 notes of 100 taka than 3 notes of 50 taka?

FRACTIONS

Concept of Fractions

 $\frac{1}{2}$ or, Half or, Half parts or, one part out of two	 $\frac{1}{2}$ or, Half or, Half parts or, one part out of two	 $\frac{1}{2}$ or, Half or, Half parts or, one part out of two
 $\frac{1}{3}$ or, one-third or, one part out of three	 $\frac{1}{3}$ or, one-third or, one part out of three	 $\frac{1}{3}$ or, one-third or, one part out of three
 $\frac{1}{4}$ or, one-fourth or, one part out of four	 $\frac{1}{4}$ or, one-fourth or, one part out of four	 $\frac{1}{4}$ or, one-fourth or, part out of four
 $\frac{2}{3}$ or two-third or two parts out of three	 $\frac{2}{3}$ or two-third or two parts out of three	 $\frac{2}{3}$ or two-third or two parts out of three

Fractions

Concept of Fractions

$\frac{3}{4}$ or three -fourths or three parts out of four

$\frac{3}{4}$ or three -fourths or three parts out of four

$\frac{3}{4}$ or three -fourths or three parts out of four

$\frac{4}{5}$ or four -fifths or four parts out of five

$\frac{4}{5}$ or four -fifths or four parts out of five

$\frac{4}{5}$ or four -fifths or four parts out of five

$\frac{1}{6}$ or one -sixth or one part out of six

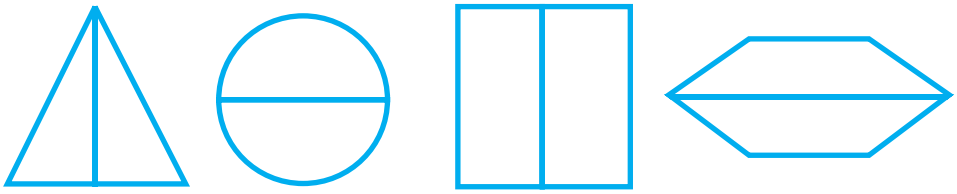
$\frac{2}{7}$ or two -sevenths or two parts out of seven

$\frac{3}{8}$ or three -eighths or three parts out of eight

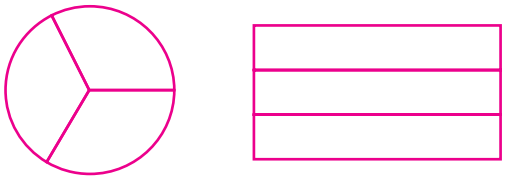
$\frac{2}{9}$ or two -nineths or two parts out of nine

Note : A line (–) has been drawn to write simple fraction. The total number of parts have been written below the line and the parts under consideration have been written above the line.

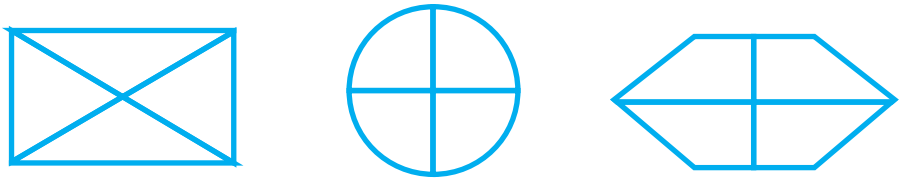
Shade $\frac{1}{2}$ portion of the following figures by a pencil :



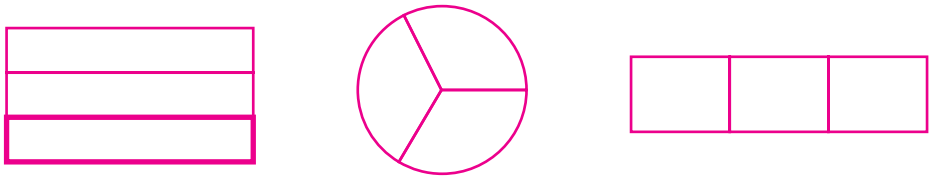
Shade $\frac{1}{3}$ portion of the following figures by a pencil :



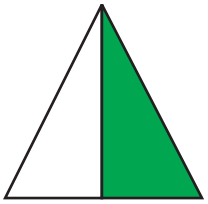
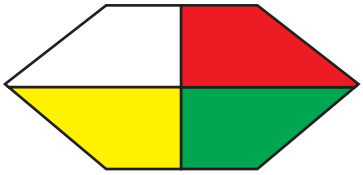
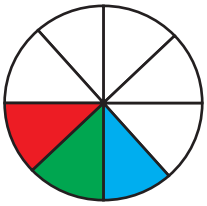
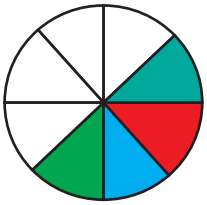
Shade $\frac{1}{4}$ portion of the following figures by a pencil :



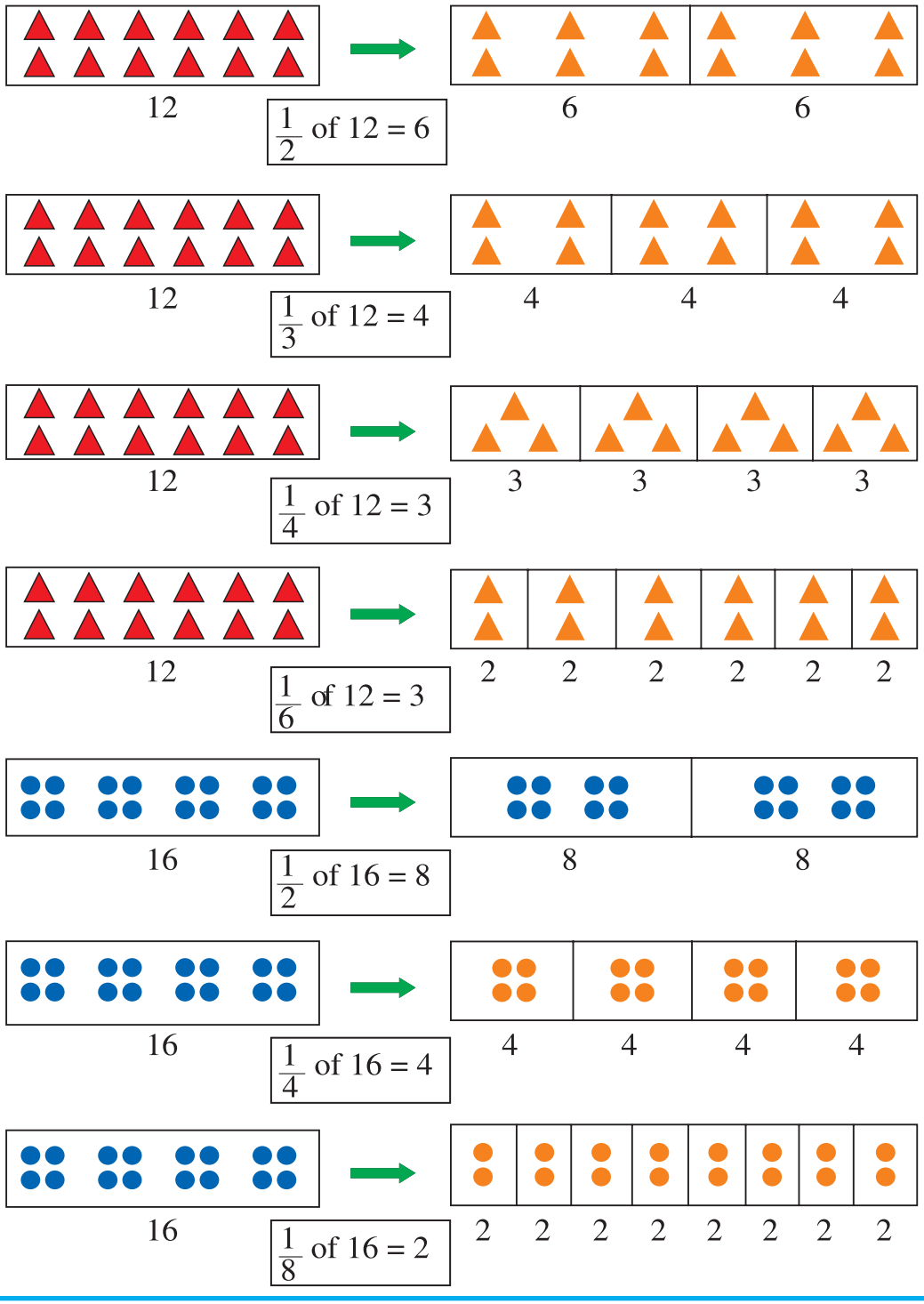
Shade $\frac{2}{3}$ portion of the following figures by a pencil :



Look at the shaded part of each picture. Write in number and word how much a shaded part is? (one in done for you)

Figure	Write in digit	Write in words
	$\frac{1}{2}$	Half
		
		
		
		
		

Concept of a part



$6 = 2 \times 3 = 6 = 3 \times 2$ $\therefore 6 \div 2 = 3$ again $6 \div 3 = 2$ $\therefore \frac{1}{2}$ of $6 = 3$ and $\frac{1}{3}$ of $6 = 2$	$8 = 2 \times 4 = 4 \times 2$ $\therefore 8 \div 2 = 4, 8 \div 4 = 2$ $\therefore \frac{1}{2}$ of $8 = 4$ and $\frac{1}{4}$ of $8 = 2$]
$10 = 2 \times 5 = 5 \times 2$ $\therefore 10 \div 2 = 5, 10 \div 5 = 2$ $\therefore \frac{1}{2}$ of $10 = 5$ and $\frac{1}{5}$ of $10 = 2$	$15 = 3 \times 5 = 5 \times 3$ $\therefore 15 \div 3 = 5, 15 \div 5 = 3$ $\therefore \frac{1}{3}$ of $15 = 5$ and $\frac{1}{5}$ of $15 = 3$
$20 = 4 \times 5 = 5 \times 4$ $\therefore 20 \times 4 = 5, 20 \div 5 = 4$ $\therefore \frac{1}{4}$ of $20 = 5$ and $\frac{1}{5}$ of $20 = 4$	$30 = 5 \times 6 = 6 \div 5$ $\therefore 30 \div 5 = 6, 30 \div 6 = 5$ $\therefore \frac{1}{5}$ of $30 = 6$ and $\frac{1}{6}$ of $30 = 5$
$42 = 6 \times 7 = 7 \times 6$ $\therefore 42 \div 6 = 7, 42 \div 7 = 6$ $\therefore \frac{1}{6}$ of $42 = 7$ and $\frac{1}{7}$ of $42 = 6$	$54 = 6 \times 9 = 9 \times 6$ $\therefore 54 \div 6 = 9, 54 \div 9 = 6$ $\therefore \frac{1}{6}$ of $54 = 9$, and $\frac{1}{9}$ of $54 = 6$

Fill in the empty boxes :

$56 = 7 \times \square = 8 \times \square$ $\frac{1}{7}$ of $56 =$	$72 = \square \times 9 = \square \times 8$ $\frac{1}{9}$ of $72 = \square$

$\frac{1}{2}$ of 1 year or 12 months	=	6	months
$\frac{1}{3}$ of 1 year or 12 months	=		months
$\frac{1}{4}$ of 1 year or 12 months	=		months
$\frac{1}{6}$ of 1 year or 12 months	=		months
$\frac{1}{2}$ of 1 month or 30 days	=	15	days
$\frac{1}{3}$ of 1 month or 30 days	=		days
$\frac{1}{5}$ of 1 month or 30 days	=		days
$\frac{1}{6}$ of 1 day or 24 hours	=		days
$\frac{1}{2}$ of 1 day or 24 hours	=	12	hours
$\frac{1}{3}$ of 1 day or 24 hours	=		hours

$\frac{1}{4}$ of 1 day or 24 hours = ☐ hours

$\frac{1}{6}$ of 1 day or 24 hours = ☐ hours

$\frac{1}{8}$ of 1 day or 24 hours = ☐ hours

$\frac{1}{2}$ of 1 hour or 60 minutes = ☐ 30 minutes

$\frac{1}{3}$ of 1 hour or 60 minutes = ☐ minutes

$\frac{1}{4}$ of 1 hour or 60 minutes = ☐ minutes

$\frac{1}{5}$ of 1 hour or 60 minutes = ☐ minutes

$\frac{1}{6}$ of 1 hour or 60 minutes = ☐ minutes

$\frac{1}{10}$ of 1 hour or 60 minutes = ☐ minutes

$\frac{1}{2}$ of 1 taka or 100 paisa = ☐ paisa

$\frac{1}{4}$ of 1 taka or 100 paisa = ☐ paisa

$\frac{1}{5}$ of 1 taka or 100 paisa = ☐ paisa

$\frac{1}{10}$ of 1 taka or 100 paisa = ☐ paisa

$\frac{1}{2}$ of 1 metre or 100 centimetre = 50 centimetre

$\frac{1}{4}$ of 1 metre or 100 centimetre = ☐ centimetre

$\frac{1}{5}$ of 1 metre or 100 centimetre = ☐ centimetre

$\frac{1}{10}$ of 1 metre or 100 centimetre = ☐ centimetre

☐ $\frac{1}{3}$ of 18 = 6

☐ $\frac{1}{5}$ of 25 = 5

☐ of 32 = 8

☐ of 1 year = 4 months

$\frac{1}{6}$ of 1 hour = ☐ minutes

☐ of 1 metre = 20 cm.

☐ of 24 = 8

$\frac{1}{6}$ of 30 = ☐

☐ of 36 = 9

$\frac{1}{3}$ of 1 month = ☐ day

☐ of 1 taka = 25 paisa

$\frac{1}{2}$ of 1 day = ☐ hour

Denominator and Numerator of Fractions

The black portion inside the circle is $\frac{3}{4}$  $\frac{3}{4}$ Here 4 is denominator (the total number of portion of the circle) and 3 is numerator (the number of black portion)

Note : The numeral above the line is numerator and the number below the line is denominator.

In the fraction $\frac{2}{5}$, 5 is denominatior and 2 is numerator.

Fill in the following boxes (one is done for you)

In the fraction $\frac{3}{8}$, [8] denominator and [3] numerater

In the fraction $\frac{3}{5}$, 3 [ ] and 5 [ ]

In the fraction $\frac{7}{8}$, 8 [ ] and 7 [ ]

If 7 is numerator and 9 is denominator, then the fraction will be [ ]

If 6 is numerator and 5 is denominator, then the fraction will be [ ]

If 5 is numerator and 7 is denominator, then the fraction will be [ ]

If 8 is denominator and 7 is numerator, then the fraction will be [ ]

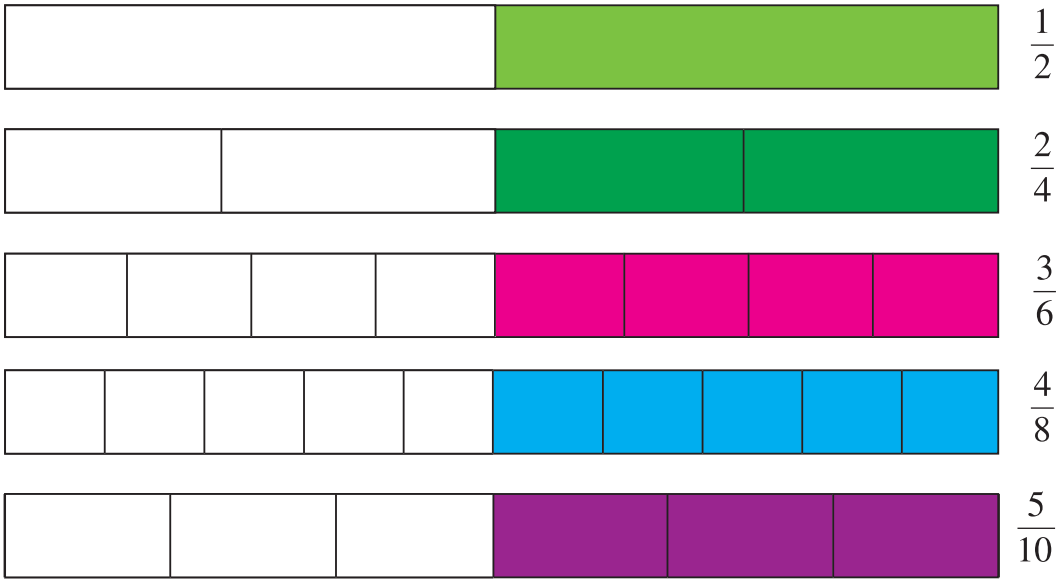
If 9 is denominator and 8 is numerator, then the fraction will be [ ]

Equivalent Fractions

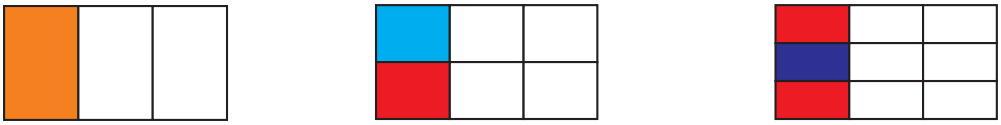
$\frac{1}{2}$  $\frac{2}{4}$  $\frac{3}{6}$  $\frac{4}{8}$  $\frac{5}{10}$ 

The fractions $\frac{1}{2}, \frac{2}{4}, \frac{3}{6}, \frac{4}{8}, \frac{5}{10}$ are equivalent.

Because, the portions $\frac{1}{2}, \frac{2}{4}, \frac{3}{6}, \frac{4}{8}, \frac{5}{10}$ are equal to each other.



$\frac{1}{2}, \frac{2}{4}, \frac{3}{6}, \frac{4}{8}, \frac{5}{10}$ are equivalent fractions.

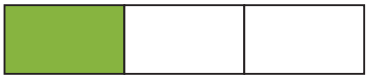


$\frac{1}{3}$ $\frac{2}{6}$ $\frac{3}{9}$

$\frac{1}{3}, \frac{2}{6}, \frac{3}{9}$ are equivalent fractions.

Identifying Equivalent Fractions

$\frac{1}{3}$



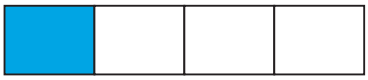
$\frac{2}{6}$

$\frac{1}{3}, \frac{2}{6}$ are equivalent fractions

$\therefore \quad \frac{1}{3} = \frac{2}{6}$

Here, $\frac{1}{3} \times \frac{2}{6}$ $\quad \frac{2}{6} \rightarrow 3 \times 2 = 6$, $\quad \frac{1}{3} \rightarrow 1 \times 6 = 6$

$\frac{2}{4}$



$\frac{3}{6}$

$\frac{2}{4} \quad \frac{3}{6}$ are equivalent fractions

$\therefore \quad \frac{2}{4} = \frac{3}{6}$

Here, $\frac{1}{4} \times \frac{3}{6}$ $\quad \frac{3}{6} \rightarrow 4 \times 3 = 12$, $\quad \frac{1}{4} \rightarrow 2 \times 6 = 12$

$\frac{1}{2}$

$\frac{3}{4}$

$\frac{1}{2}, \frac{3}{4}$ are not equivalent fractions

$\therefore \quad \frac{1}{2} = \frac{3}{4}$ are not equal

Here, $\frac{1}{2} \times \frac{3}{4}$ $\quad \frac{3}{4} \rightarrow 2 \times 3 = 6$, $\quad \frac{1}{2} \rightarrow 1 \times 4 = 4$

$\frac{2}{4}$ of $8 = 4$

$\frac{2}{4}$, $\frac{4}{8}$ equivalent fractions

$\frac{4}{8}$ of $8 = 4$

$\therefore \frac{2}{4} = \frac{4}{8}$

Here, $\frac{2}{4} \times \frac{4}{8}$ $4 \times 4 = 16$, $2 \times 8 = 16$

$\frac{3}{4}$ of $12 = 9$

$\frac{4}{6}$ of $12 = 8$

Here, $\frac{3}{4} \times \frac{4}{6}$ $4 \times 4 = 16$, $3 \times 6 = 18$

$\therefore \frac{3}{4}$, $\frac{4}{6}$ are not equivalent fractions

$\therefore \frac{3}{4}$, $\frac{4}{6}$ are not equal.

Formation of equivalent fractions

Equivalent fractions of $\frac{1}{2}$:

$\frac{1}{2} = \frac{1 \times 2}{2 \times 2} = \frac{2}{4}$ $\quad$ $\frac{1}{2} = \frac{1 \times 3}{2 \times 3} = \frac{3}{6}$

$\frac{1}{2} = \frac{1 \times 4}{2 \times 4} = \frac{4}{8}$ $\quad$ $\frac{1}{2} = \frac{1 \times 5}{2 \times 5} = \frac{5}{10}$

$\frac{2}{4}$, $\frac{3}{6}$, $\frac{4}{8}$, $\frac{5}{10}$ etc. are equivalent fractions of $\frac{1}{2}$.

Equivalent fractions of $\frac{1}{3}$

$\frac{1}{3} = \frac{1\times2}{3\times2} = \frac{2}{6}$; $\frac{1}{3} = \frac{1\times3}{3\times3} = \frac{3}{9}$;

$\frac{1}{3} = \frac{1\times4}{3\times4} = \frac{4}{12}$; $\frac{1}{3} = \frac{1\times5}{3\times5} = \frac{5}{15}$

$\frac{2}{6}, \frac{3}{9}, \frac{4}{12}, \frac{5}{15}$ etc. are equivalent fractions of $\frac{1}{3}$

Equival ent fraction of $\frac{2}{3}$

$\frac{2}{3} = \frac{2\times2}{3\times2} = \frac{4}{6}$; $\frac{2}{3} = \frac{2\times3}{3\times3} = \frac{6}{9}$;

$\frac{2}{3} = \frac{2\times4}{3\times4} = \frac{8}{12}$; $\frac{2}{3} = \frac{2\times5}{3\times5} = \frac{10}{15}$;

$\frac{4}{6}, \frac{6}{9}, \frac{8}{12}, \frac{10}{15}$ etc. are equivalent fractions of $\frac{2}{3}$

Equivalent fractions of $\frac{1}{4}$:

$\frac{1}{4} = \frac{1\times2}{4\times2} = \frac{2}{8}$; $\frac{1}{4} = \frac{1\times3}{4\times3} = \frac{3}{12}$;

$\frac{1}{4} = \frac{1\times4}{4\times4} = \frac{4}{16}$; $\frac{1}{4} = \frac{1\times5}{4\times5} = \frac{5}{20}$;

$\frac{2}{8}, \frac{3}{12}, \frac{4}{16}, \frac{5}{20}$ etc. are equivalent fractions of $\frac{1}{4}$

1. Find out 4 equivalent fractions of each of the following fractions (one is done for you) :

a. $\frac{2}{3}$, $\boxed{\frac{4}{6}}$, $\boxed{\frac{6}{9}}$, $\boxed{\frac{8}{12}}$, $\boxed{\frac{10}{15}}$,

b. $\frac{3}{4}$, $\square$, $\square$, $\square$, $\square$,

c. $\frac{3}{5}$, $\square$, $\square$, $\square$, $\square$,

d. $\frac{5}{6}$, $\square$, $\square$, $\square$, $\square$,

d. $\frac{2}{7}$, $\square$, $\square$, $\square$, $\square$,

2. Fill in the empty boxes (The first one in done for you) :

a. $\frac{1}{2} = \frac{4}{\boxed{8}}$; $\frac{1}{2} = \frac{\square}{6}$; $\frac{1}{2} = \frac{7}{\square}$; $\frac{1}{2} = \frac{3}{\square}$;

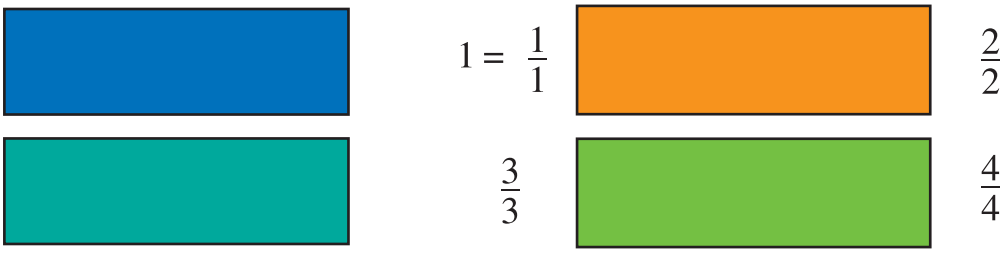
b. $\frac{1}{3} = \frac{5}{\square}$; $\frac{1}{5} = \frac{2}{\square}$; $\frac{2}{5} = \frac{\square}{10}$; $\frac{3}{4} = \frac{\square}{8}$;

c. $\frac{1}{6} = \frac{3}{\square}$; $\frac{1}{7} = \frac{3}{\square}$; $\frac{1}{7} = \frac{\square}{14}$; $\frac{4}{5} = \frac{\square}{15}$;

3. Write the answer in the empty boxes by identifying whether each fractions below equivalent or not (The first two are done for you) :

a.	$\frac{3}{4}, \frac{6}{8}$	$\frac{3}{4} \times \frac{6}{8}$ → 4 x 6 = 24, 3 x 8 = 24	Equivalent
b.	$\frac{4}{6}, \frac{1}{3}$	$\frac{4}{6} \times \frac{1}{3}$ → 6 x 1 = 6, 4 x 3 = 12	Not equivalent
c.	$\frac{3}{6}, \frac{4}{8}$		
d.	$\frac{1}{7}, \frac{2}{14}$		
e.	$\frac{3}{6}, \frac{6}{12}$		
f.	$\frac{2}{3}, \frac{3}{6}$		

Equivalent fractions of 1



1 x 2 = 2
2 x 1 = 2

1 x 3 = 3
3 x 1 = 3

1 x 4 = 4
4 x 1 = 4

$\therefore \frac{2}{2}, \frac{3}{3}, \frac{4}{4}$ etc. each fractions are equivalent of 1.

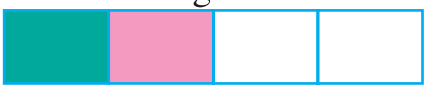
That is, $1 = \frac{1}{1} = \frac{2}{2} = \frac{3}{3} = \frac{4}{4}$ etc.

Comparison of Fractions

Figure

$\frac{3}{4}$

Figure



$\frac{2}{4}$

$\frac{3}{4}$ is bigger than $\frac{2}{4}$; i.e. $\frac{3}{4} > \frac{2}{4}$

Again,

$\frac{2}{4}$ is smaller than $\frac{3}{4}$; i.e. $\frac{2}{4} < \frac{3}{4}$

$\frac{3}{8}$

$\frac{5}{8}$

$\frac{3}{8}$ is smaller than $\frac{3}{8}$; i.e. $\frac{3}{8} < \frac{5}{8}$

Again,

$\frac{5}{8}$ is bigger than $\frac{3}{8}$; i.e. $\frac{5}{8} > \frac{3}{8}$

$\frac{5}{8}$ = 5 parts out of 8 parts

$\frac{3}{8}$ = 3 parts out of 8 parts

$5 > 3 \therefore \frac{5}{8} > \frac{3}{8}$

$\frac{4}{9}$ = 4 parts out of 9 parts

$\frac{7}{9}$ = 7 parts out of 9 parts

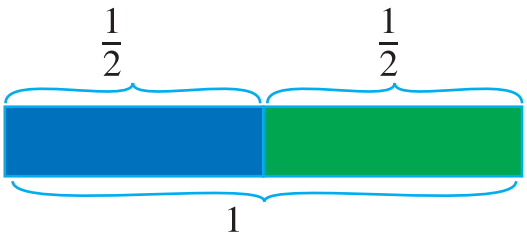
$4 < 7 \therefore \frac{4}{9} < \frac{7}{9}$

$\frac{7}{15}$ = 7 parts out of 15 parts

$\frac{6}{15}$ = 6 parts out of 15 parts

$7 < 6 \therefore \frac{7}{15} > \frac{6}{15}$

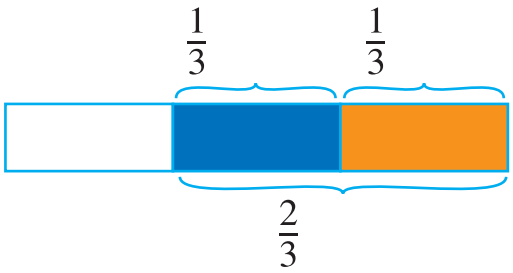
Addition of fractions



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

But, $1 = \frac{2}{2} = \frac{1+1}{2}$

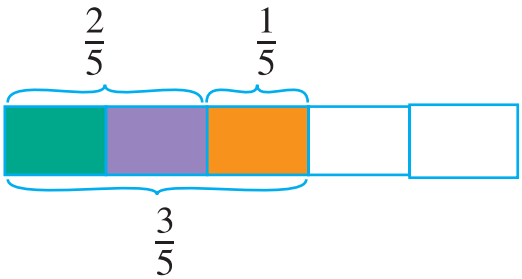
$\therefore \frac{1}{2} + \frac{1}{2} = \frac{1+1}{2}$



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

But, $\frac{2}{3} = \frac{1+1}{3}$

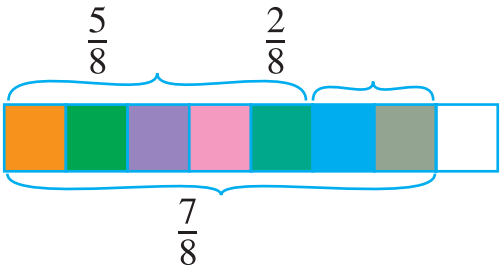
$\therefore \frac{1}{3} + \frac{1}{3} = \frac{1+1}{3}$



$$\frac{2}{5} + \frac{1}{5} = \frac{3}{5}$$

But, $\frac{3}{5} = \frac{2+1}{5}$

$\frac{2}{5} + \frac{1}{5} = \frac{2+1}{5}$



$$\frac{5}{8} + \frac{2}{8} = \frac{7}{8}$$

But, $\frac{7}{8} = \frac{5+2}{8}$

$\frac{5}{8} + \frac{2}{8} = \frac{5+2}{8}$

$$\frac{2}{6} + \frac{3}{6} = \frac{2+3}{6} = \frac{5}{6}$$

$$\frac{4}{9} + \frac{3}{9} = \frac{4+3}{9} = \frac{7}{9}$$

$\frac{3}{8} + \frac{1}{8} = \frac{3+1}{8}$

$= \frac{4}{8}$

$= \frac{1}{2}$

Because, $\frac{4}{8}$ and $\frac{1}{2}$ are equivalent fractions.

$\frac{5}{12} + \frac{4}{12} = \frac{5+4}{12}$

$= \frac{9}{12}$

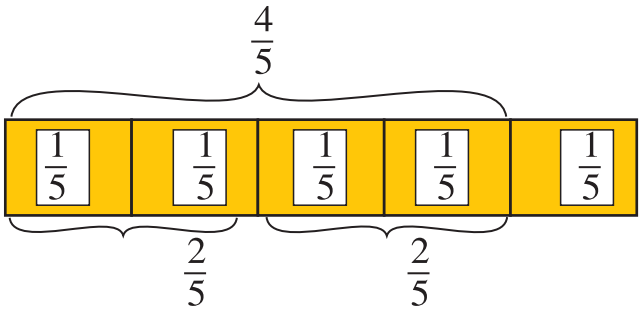
$= \frac{3}{4}$

Because, $\frac{9}{12}$ and $\frac{3}{4}$ are equivalent fractions.

Fill in the boxes (The first one in done for you) :

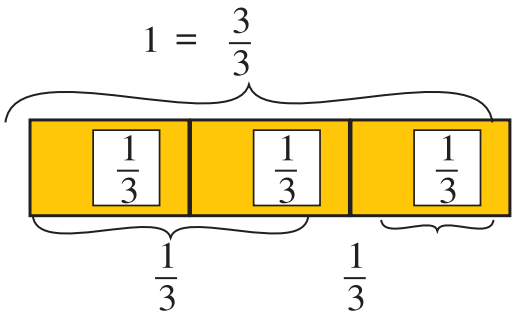
1. $\frac{4}{11} + \frac{5}{11} = \boxed{\frac{9}{11}}$
2. $\frac{1}{4} + \frac{2}{4} = \boxed{}$
3. $\frac{2}{7} + \frac{3}{7} = \boxed{}$
4. $\frac{5}{8} + \frac{3}{6} = \boxed{}$
5. $\frac{7}{12} + \frac{3}{12} = \boxed{}$
6. $\frac{9}{14} + \frac{4}{14} = \boxed{}$
7. $\frac{7}{15} + \frac{4}{15} = \boxed{}$
8. $\frac{5}{16} + \frac{9}{16} = \boxed{}$
9. $\frac{9}{19} + \frac{5}{19} = \boxed{}$
10. $\frac{7}{20} + \frac{9}{20} = \boxed{}$
11. $\frac{8}{25} + \frac{9}{25} = \boxed{}$
12. $\frac{7}{12} + \frac{4}{12} = \boxed{}$

Subtraction of Fractions



$\frac{4}{5} - \frac{2}{5} = \frac{2}{5}$ Again, $\frac{2}{5} = \frac{4-2}{5}$

$\therefore \frac{4}{5} - \frac{2}{5} = \frac{4-2}{5} = \frac{2}{5}$



$1 - \frac{2}{3} = \frac{1}{3}$ Again, $\frac{1}{3} = \frac{3-2}{3}$

$\therefore 1 - \frac{2}{3} = \frac{3}{3} - \frac{2}{3} = \frac{3-2}{3} = \frac{1}{3}$

$\frac{7}{9} - \frac{5}{9} = \frac{7-5}{9} = \frac{2}{9}$

$1 - \frac{2}{5} = \frac{5}{5} - \frac{2}{5} = \frac{5-2}{5} = \frac{3}{5}$

$\frac{5}{8} - \frac{3}{8} = \frac{5-3}{8} = \frac{2}{8} = \frac{1}{4}$

Because, $\frac{2}{8}$ and $\frac{1}{4}$ are equivalent fractions.

$\frac{7}{12} - \frac{5}{12} = \frac{7-5}{12} = \frac{2}{12} = \frac{1}{6}$

Because, $\frac{2}{12}$ and $\frac{1}{6}$ are equivalent fractions.

Fill in the boxes (The first one in done for you):

1. $\frac{8}{12} - \frac{3}{12} = \boxed{\frac{5}{12}}$
2. $\frac{7}{13} - \frac{5}{13} = \boxed{}$
3. $\frac{9}{10} - \frac{5}{10} = \boxed{}$
4. $1 - \frac{4}{9} = \boxed{}$
5. $1 - \frac{7}{8} = \boxed{}$
6. $\frac{8}{15} - \frac{1}{15} = \boxed{}$
7. $\frac{9}{20} - \frac{7}{20} = \boxed{}$
8. $\frac{7}{25} - \frac{2}{25} = \boxed{}$
9. $\frac{9}{31} - \frac{8}{31} = \boxed{}$
10. $\frac{9}{12} - \frac{7}{12} = \boxed{}$

Exercise-9

1. Write the following fractions in (digits):
   a. the fourths, b. five - sevenths, c. three - eights,
   d. nine elevenths e. seven - fifteenth, f. eight twenty ninth.

2. Write the following fractions in words :
   a. $\frac{3}{5}$ b. $\frac{7}{8}$ c. $\frac{4}{15}$ d. $\frac{5}{22}$ e. $\frac{7}{33}$ f. $\frac{9}{39}$

3. a. $\frac{3}{4}$ of 8 = ? b. $\frac{2}{3}$ of 9 = ?
   c. $\frac{1}{3}$ of 12 = ? d. $\frac{2}{6}$ of 12 = ?
   e. $\frac{1}{4}$ of 20 = ? f. $\frac{3}{5}$ of 25 = ?

4. a. $\frac{1}{2}$ of 1 year = how many months?
   b. $\frac{1}{2}$ of 1 month = how many days?
   c. $\frac{1}{4}$ of 1 day = how many hours?
   d. $\frac{1}{4}$ of 1 Taka = how many paisa?
   e. $\frac{1}{10}$ of 1 metre = how many centimetres ?
   f. $\frac{1}{5}$ of 1 hour = how many minutes ?

5. Identify which of the following pair of fractions are equivalent or not equivalent ?

a. $\frac{1}{2}, \frac{2}{4}$ b. $\frac{3}{5}, \frac{6}{10}$ c. $\frac{2}{7}, \frac{3}{7}$ d. $\frac{3}{4}, \frac{3}{8}$

e. $\frac{4}{5}, \frac{2}{3}$ f. $\frac{4}{6}, \frac{8}{12}$ g. $\frac{2}{6}, \frac{3}{12}$

6. Compare the following fractions and express in words :

a. $\frac{3}{4} > \frac{1}{4}$ b. $\frac{2}{5} < \frac{3}{5}$ c. $\frac{7}{10} > \frac{5}{10}$ d. $\frac{7}{10} < \frac{9}{10}$

7. Compare the following fractions & write the symbols of bigger or smaller in the boxes :

a. $\frac{5}{6} \square \frac{3}{6}$ b. $\frac{5}{8} \square \frac{7}{8}$ c. $\frac{7}{12} \square \frac{9}{12}$

d. $\frac{7}{16} \square \frac{5}{16}$ e. $\frac{6}{25} \square \frac{9}{25}$ f. $\frac{8}{21} \square \frac{5}{21}$

8. Add :

a. $\frac{3}{4} + \frac{1}{8}$ b. $\frac{3}{5} + \frac{1}{5}$ c. $\frac{2}{6} + \frac{3}{6}$

d. $\frac{5}{7} + \frac{1}{7}$ e. $\frac{5}{11} + \frac{3}{11}$ f. $\frac{9}{13} + \frac{2}{13}$

g. $\frac{8}{20} + \frac{5}{20}$ h. $\frac{7}{25} + \frac{5}{25}$ i. $\frac{2}{31} + \frac{8}{31}$

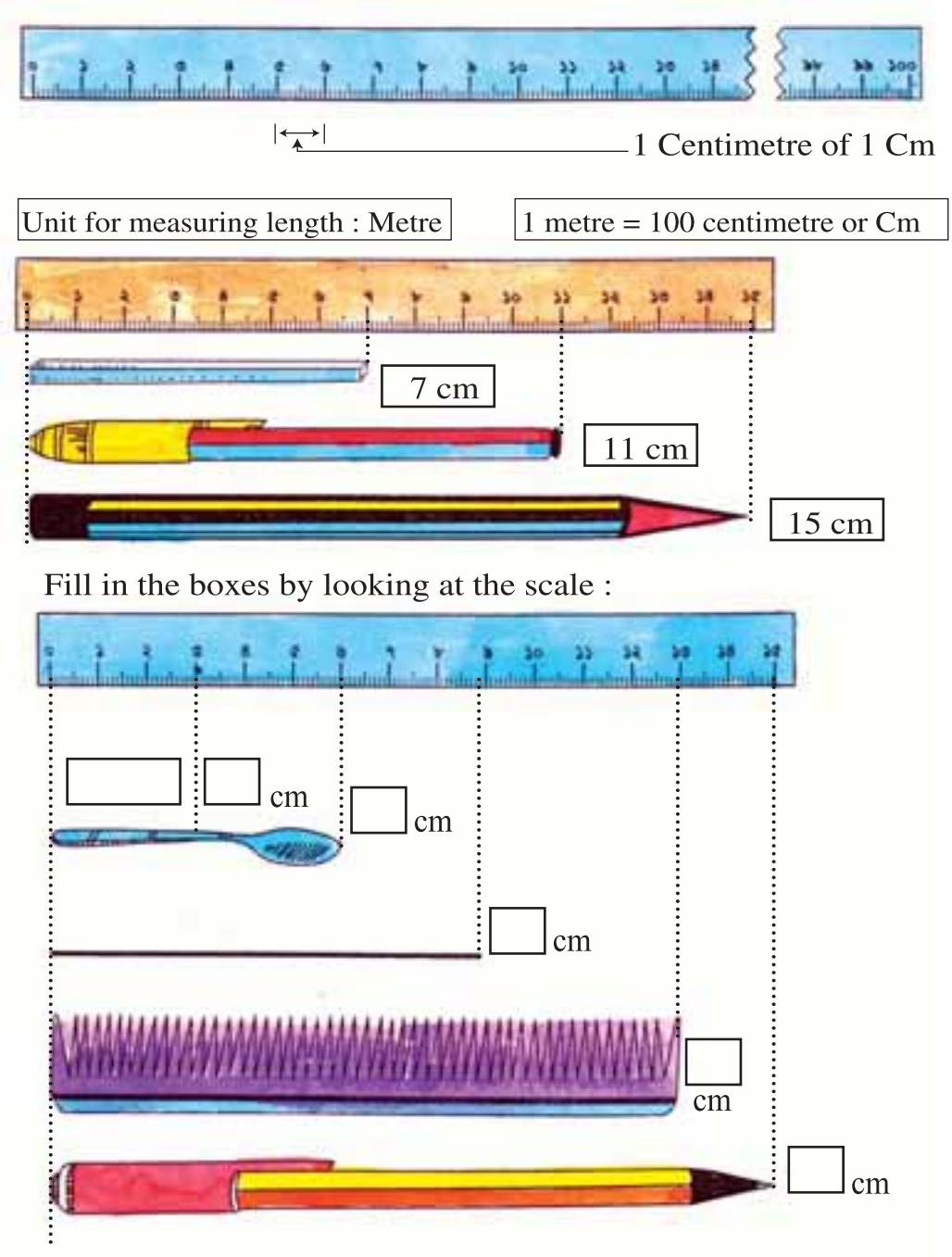
9. Subtract :

a. $\frac{3}{7} - \frac{2}{7}$ b. $\frac{7}{9} - \frac{5}{9}$ c. $1 - \frac{1}{3}$

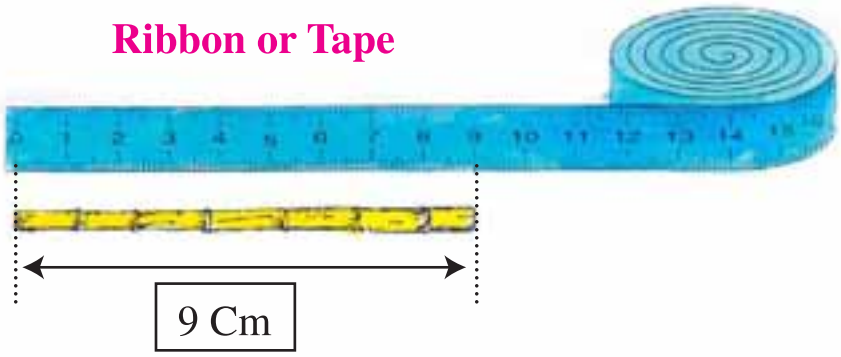
d. $1 - \frac{5}{6}$ e. $\frac{8}{18} - \frac{5}{18}$ f. $\frac{5}{21} - \frac{4}{21}$

Measurement

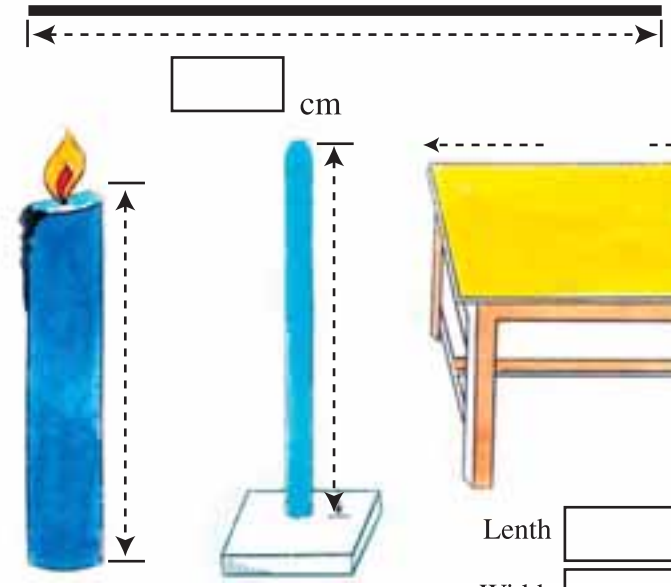
Measures of length

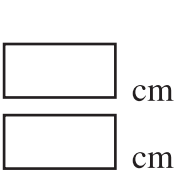


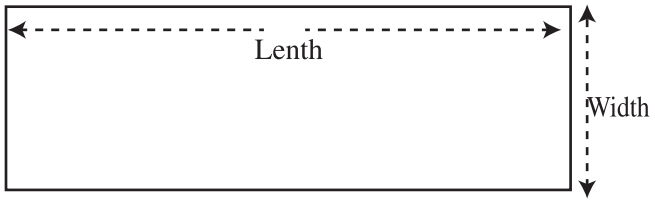
Ribbon or Tape



PI. Insert the Pictures







cm

cm

Lenth cm

Width cm

Height cm

cm

cm

Units of Measuring Length

100 Centimetre = 1 Metre or 1 m
1000 Metre = 1 Kilometre or 1 km

Fill in the empty boxes (Two are done for you) :

4 metre 20 centimetre = 420 centimetre

8 metre = ☐ centimetre

5 metre 50 centimetre = ☐ centimetre

2 kilometre 500 metre = 2500 metre

4 kilometre = ☐ metre

3 kelometre 200 metre = ☐ metre

8 kelometre 300 metre = ☐ metre

Example 1 : Express 25 metre in centimetre

Solution : 1 metre = 100 centimetre
∴ 25 metre = 25 x 100 centimetre = 2500 centimetre
Ans : 2500 centimetre

Example 2 : Express 4 kilometre in metre

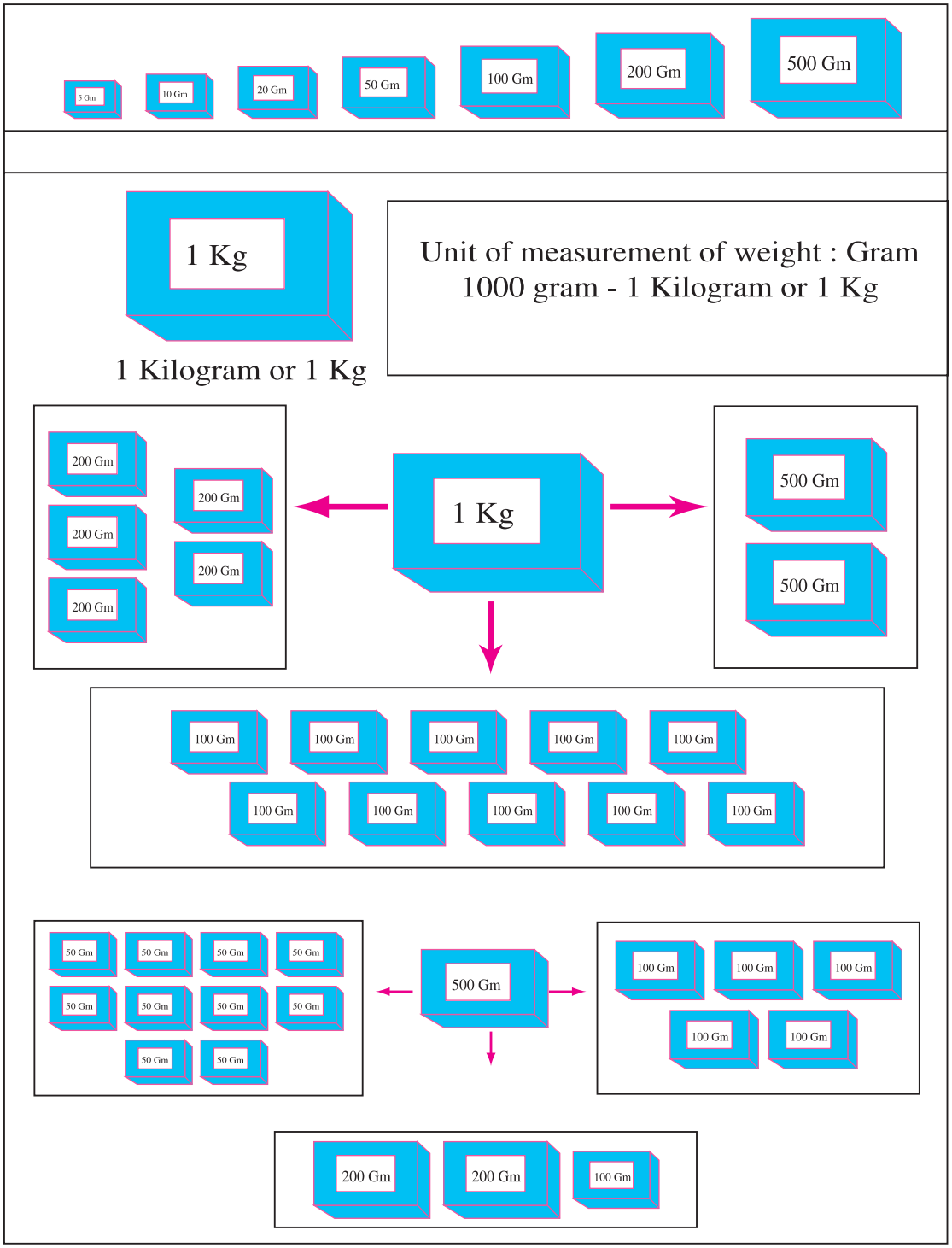
Solution : 1 kelometre = 1000 metre
∴ 4 kilometre = 4 x 1000 metre = 4000 metre
Ans : 4000 metre

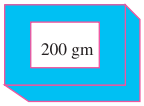
Example 3 : Express 22 metre 25 centimetre in centimetre

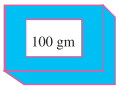
Solution : 22 metre 25 centimetre
= 22 x 100 centimetre + 25 centimetre
= 2200 centimetre + 25 centimetre
= 2225 centimetre

Ans : 2225 centimetre

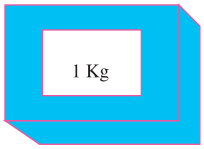
Measurement of Weight

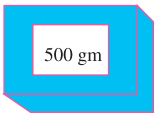


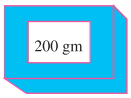


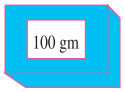


500 gm + 200 gm + 200 gm + 50 gm = 950 gm









1 kg + 500 gm + 200 gm + 100 gm + 50 gm = 1 kg 850 gm

Match by drawing lines (One is done for you)	950 gm
3 Kilogram	2500 gm
2 200 gm & 1 50 gm wt	3000 gm
1 500 gm, 2 200 gm & 1 50 gm wts	3050 gm
1 1 kg, 1, 500 gm and 1 100 gm wt	250 gm
7 kg	1 kg 600 gm
2 kg 500 gm	450 gm
3 kg 50 gm	1950 gm
1 kg 950 gm	7000 gm

Example 1 : Express 6 kg in gram

Solution : 1 kg = 1000 gm

$\therefore$ 6 kg = 6 X 1000 gm

= 6000 gm

Ans : 6000 gm

Example 2 : Express 3 kg 750 gm in gm

Solution : 1 kg = 1000 gm

$\therefore$ 3 kg = 3 X 1000 gm

= 3000 gm

3000 gm	
+ 750 gm	
3750 gm	

Ans : 3750 gm

Example 3 : How much is the total weight of a 1 kg wt., a 500 gm wt. and an 200 gm wt.?

Solution :

One 1 kg wt	=	1000 gm
One 500 gm wt	=	500 gm
One 200 gm wt	=	200 gm
Total	=	1700 gm

Ans : 1700 gm

Example 4 : A shopkeeper used Two 1 kg weights, one 200 gm wt for weighing one bag of potatoes. What is the weight of that bag of potatoes ?

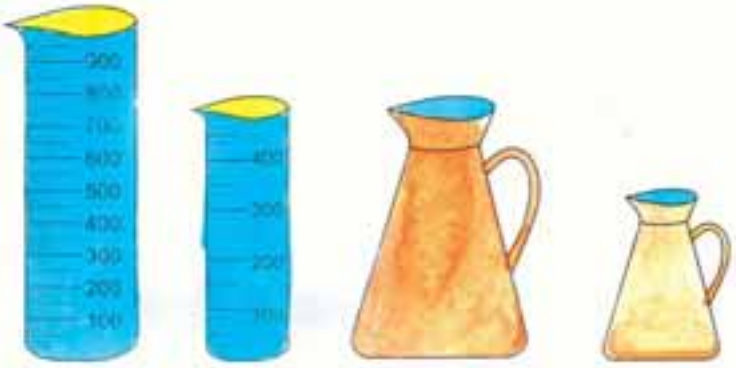
Solution :

Two 1 kg weights	=	2 X 1000 gm
	=	2000 gm
Two 1 kg weights	=	2000 gm
One 200 gm weights	=	200 gm
Wt of 1 bag of potato	=	2200 gm

Ans : 2200

Measurement of volume of Liquid

Measurement of litre



1 Litre half Litre 1 Litre half Litre

5 Litre 2 Litre 1 Litre

Unit of measuring volume of liquid : Litre
1 litre = 1000 mililitre

Unit of measuring volume of liquid : Litre

Exercise- 10

1. Match with correct units by drawing lines :

	Distance of Faridpur from Dhaka		Metre
	Length of a pencil		Litre
	Length of a house		Milimetre
	Weight of one bag of rice		Gram
	One bottle Soyabeen oil		Kilometre
	Weight of two small tomatoes		Kilogram
	Volume of one teaspoon of water		Centimetre

2. Fill in the empty boxes :

a 1 kg = ☐ gm (b) 1 metre = ☐ cm

c 1 kilometre = ☐ metre (d) 1 m. 70 cm = ☐ cm

e ☐ milimetre = 1 litre (f) 2 kg 500 gm = ☐ gm

3. Express in centimetre :

a. 25 metre b. 18 metre 72 cm

c. 47 metre 52 cm d. 39 metre 20 cm

4. Express in metre :

a. 3 kilometre b. 10 kilometre

c. 5 kilometre 750 metre d. 8 kilometre 500 metre

5. Express in gram :

a. 7 kilogram b. 3 kilogram 300 gm

c. 6 kilogram 500 gm d. 8 kilogram 900 gm

6. Measure the length of your classroom by using metre tape & write in your khata

7. Measure the length & width of the bench you sit on by using metre scale & write in your khata.

8. The weight of one bag of salt is 1 kg 50gm. What weights you need to weight the bag?

Measures of time

Reading time in a clock

12.00

3.00

9.00

1.00

6.00

10.00

Write the time shown on the dials (one is done for you)

5.00

Reading the clock

			
15 minutes past 12	30 minutes past 1	45 minutes past 3	50 minutes past 7
			
15 minutes past 9	8 minutes past 10	20 minutes past 11	30 minutes past 12

Read the time and write (two have been done for you)

			
30 minutes past 10			
			
15 minutes past 7			
			

Addition and Subtraction of Measures of time

Units of Measures of Time

60 seconds = 1 minute	30 days = 1 month
60 minutes = 1 hour	12 months = 1 year
24 hours = 1 day	365 days = 1 year
7 days = 1 week	

Example 1.

Add :

Hour	Minute	Second
4	25	21
9	30	28

Solution :

Hour	Minute	Second
4	25	21
9	30	28
13	55	49

Ans : 13 Hours 55 minutes 49 seconds

Example 1.

Add :

Hour	Minute	Second
24	35	45
12	20	35

Solution :

Hour	Minute	Second
24	35	45
12	20	35
12	15	10

Ans : 12 Hours 15 minutes 10 seconds

Example 3. Rina reads 2 hours and 15 minutes in the morning and 3 hours and 30 minutes in the night. How much time does she read daily?

Solution :

Hour	Minute
2	15
+ 3	30
5	45

Ans : 5 hours 45 minutes

Example 4. Anu started for his uncle's house at 7:20 in the morning. He reached there at 9:50 in the moring. How much time was needed to reach his unlce's house ?

Solution :

Hour	Minute
9	50
- 7	20
2	30

Ans : 2 hours 30 minutes

Exercise-11

1. Fill in the empty boxes :

a. 3 days = ☐ hour

b. 2 hours = ☐ minutes

c. ☐ day = 2 weeks

d. 1 year = ☐ day

e. ☐ month = 1 year

f. ☐ second = 1 minute

2. Add

a.

Minute	Second
4	23
2	12

b.

Minute	Second
7	15
5	28

c.

Hour	Minute	Second
5	12	23
3	25	26

d.

Hour	Minute	Second
9	19	12
7	22	28

3. Subtract

a.

Minute	Second
9	7
6	5

b.

Minute	Second
15	27
4	18

c.

Hour	Minute	Second
18	52	25
7	16	17

d.

Hour	Minute	Second
15	17	30
8	0	5

4. Mr Mijan walks for 1 hour 20 minutes in the morning. In the afternoon he walks for 2 hours 15 minutes. How much time does he walk in total ?

5. Kali's school breaks at 11.30 am. She takes 25 minutes to reach her home. At what time does she reach home?

6. Roni starts reading at 7.15 am. He finishes his lessons at 10.50 am. How much time does he read in total?

7. One day rain started at 8:25 in the morning. The rain stopped at 10:20 am. How long did it rain ?

Uses of Calendar

Calendar

Baisakh 1410

Sat	Sun	Mon	Tues	Wed	Thurs	Fri
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Here, 1st of Baisakh month of 1410 Bangla year is Monday.

10th of Baisakh month is Wednesday.

26th of Baisakh month is Friday.

7th, 14th, 21st and 28th of Baisakh month are Sundays.

The dates of Thursdays of Baisakh month are 4, 11, 18 and 25.

There are 5 Mondays in the month of Baisakh.

November 2003

Sat	Sun	Mon	Tues	Wed	Thurs	Fri
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Here, 1st of November month of 2003 is Saturday.

14th of November is Friday.

25th of November is Tuesday.

The dates 2, 9, 16, 23 & 30 of November month are Sundays.

The dates of Saturdays of the month of November are 1, 8, 15, 22 & 29.

There are 4 Tuesdays in the month of November.

In the calendar, there are :

a. Specific year
b. Name of the month
c. Name of the days
d. Dates according to days.

Number of days of the Bangla month

Months	No. of Days	Months	No. of Days
Baisakh	31	Kartik	30
Jaistha	31	Agrahawan	30
Ashar	31	Paush	30
Shravon	31	Magh	30
Bhadra	31	Falgun	30
Ashween	30	Chaitra	30

Number of days of different months in the year 2003

Months	No. of Days	Month	No. of Days
January	31	July	31
February	28	August	31
March	31	September	30
April	30	October	31
May	31	November	30
June	30	December	31

Fill in the boxes (One is done for you) :

Fourth Baisakh of 1410 is [Thurs] day

23rd Baisakh of 1410 is [ ] day

1st Monday of the Baisakh of 1410 is [ ] day

The last Wednesday November of 2003 is [ ] date

The number of Fridays is November 2003 is [ ]

20th November of 2003 is [ ] day

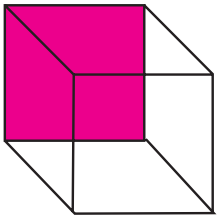
The 5th month of Bangla year is [ ]

The 7th month of English year is [ ]

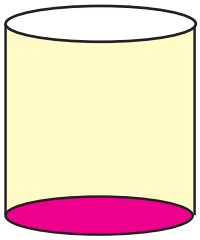
The 1st month of Bangla year is [ ]

The next month of Falgun is [ ]

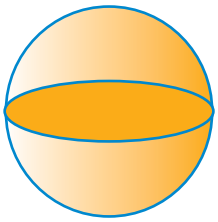
Geometric Shape



Cube

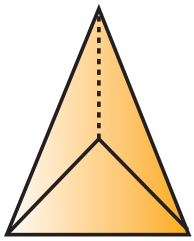


Cylinder

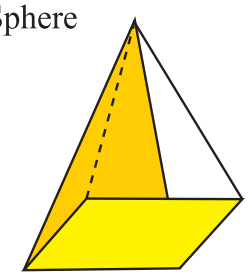


Sphere

Cone

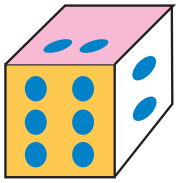


Pyramid



Pyramid

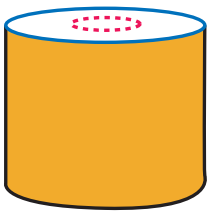
Solids of different shapes



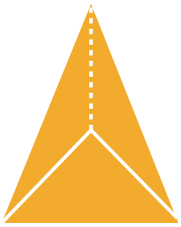
Cube/Shape

Cone shaped

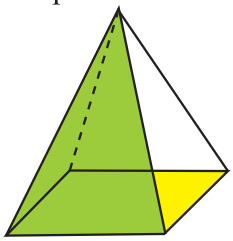
Sphere shaped



Cylinder shaped

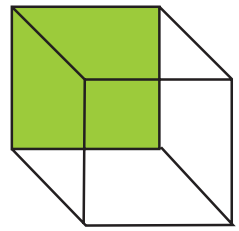


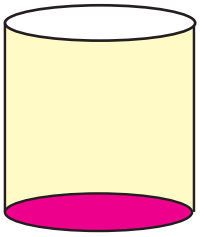
Pyramid shaped

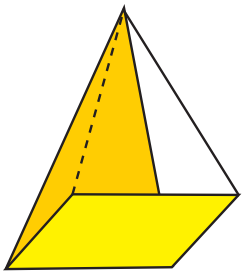


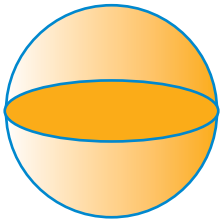
Pyramid shaped

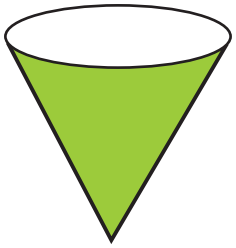
Match the name with the correct shape by drawing lines (One is done for you)











Sphere

Pyramid

Circle

Cube

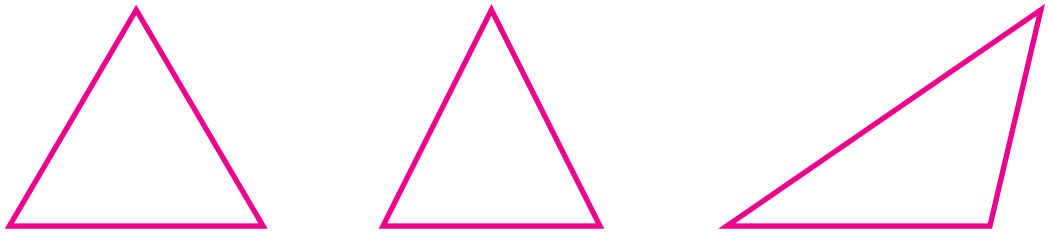
Cone

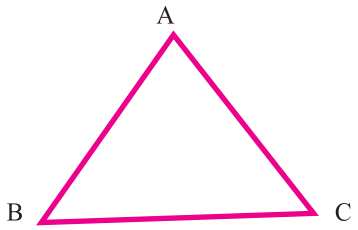
Cylinder

Write the name of the shapes by looking at the figure of the solids (One is done for you)

 _____	 _____
 _____	 _____
 _____	 _____
 _____	 _____
 _____	 _____
 _____	 _____
 _____	 _____

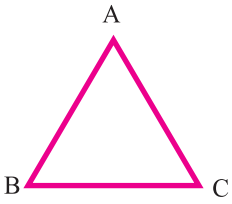
Triangle





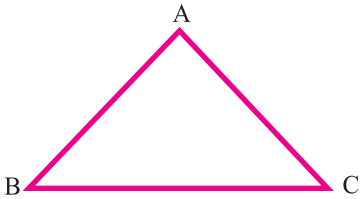
ABC is a triangle
AB, BC and CA are the three sides of the triangle

Triangle based on arms



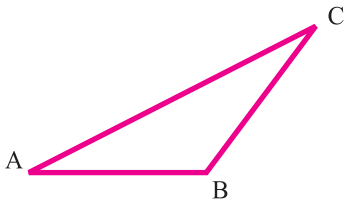
Equilateral Triangle

ABC is an Equilateral triangle.
Because,
arm AB = arm BC = arm CA.



Isoceles Triangle

ABC is an Lerosceles triangle
Because, arm AB = arm AC

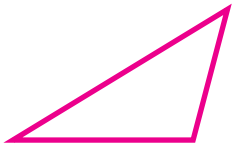
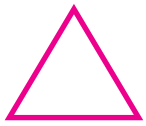
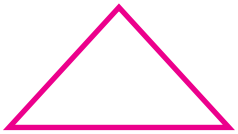
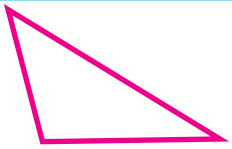
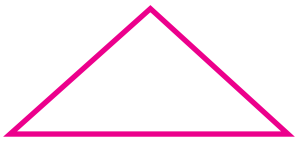
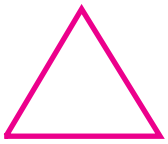
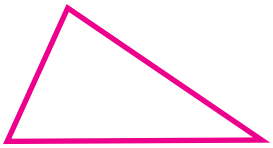


Obtuse Triangle

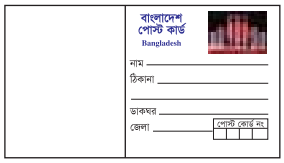
ABC is an Obtuse triangle
Because, none of the two arms are equal.

Triangle according to sides

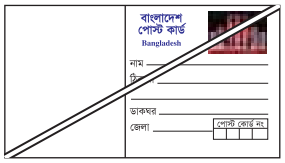
Write the name of the triangles at the right (One is done for you)

	Obtuse Triangle
	
	
	
	
	
	
	

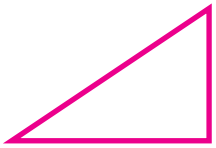
Triangle according to sides



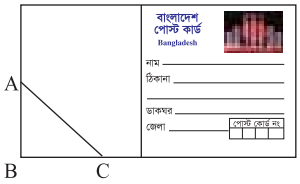
A postcard



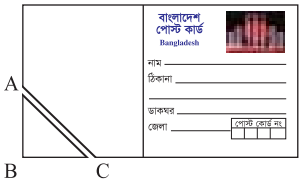
The postcard cut is diagonally



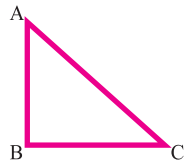
Lines have been drawn on three sides by placing one portion on the paper. So, an obtuse triangle is formed.



Two points at AB and BC of the postcard with equal distance have been taken.

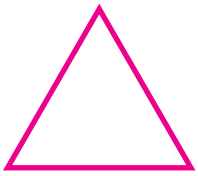


The postcard has been cut along the two points

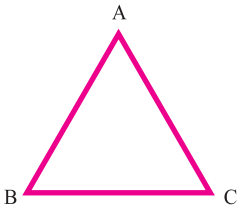


A triangle is drawn by placing the cutt portion on the paper. ABC is an isosceles.

3 sticks
3 cm long each.



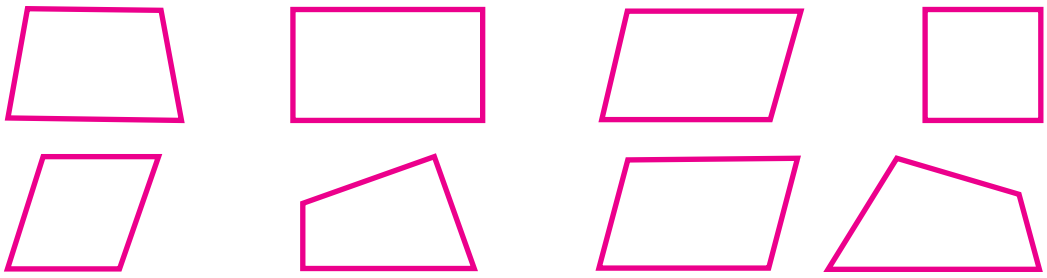
The shape of equilateral triangle has been formed by combining the ends of the three stricks.



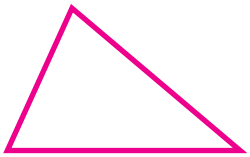
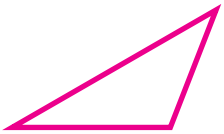
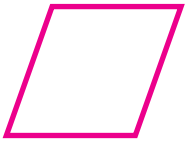
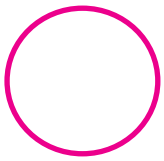
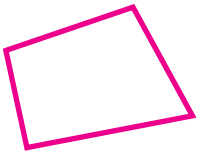
Dots have been placed at the ends of the three sticks. The dots are trimmed with each other by using a scale. This is an equilateral triangle.

Quadrilateral

Quadrilaterals of different shapes

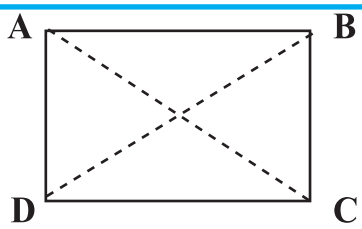


Put (√) marks in the boxes at the right of the figures which are quadrilatered. Put (x) marks in the boxes at the right of those that are not quadrilateral (Two are done for you)

	✔		☒
	☐		☐
	☐		☐
	☐		☐
	☐		☐

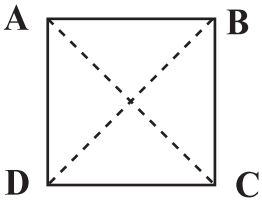
Quadrilateral

Rectangular and Square Quadrilateral



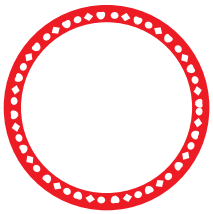
Rectangle or Rectangular Quadrilateral

ABCD is a Rectangle or Rectanguler Quadrilateral.
Here, AB = CD, AD = BC



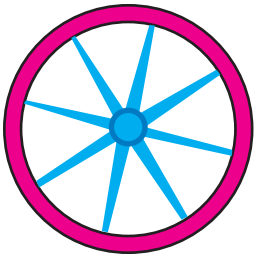
Square or Square shaped Quadrilateral

ABCD is a square or square shaped quadrilateral.
Here, AB = BC= CD=DA
and AC = BD.



Bangle

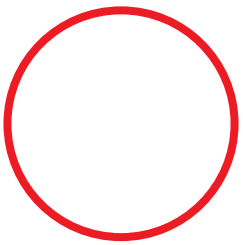
Ring



Wheel

Glass

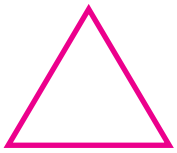
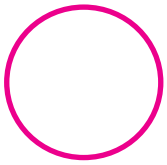
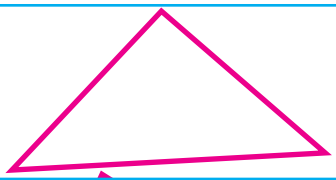
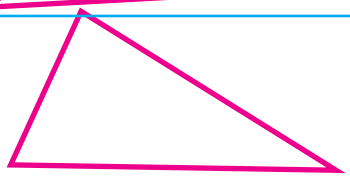
Among the above figures, the shape of the bangle, the ring and the wheel is round. The top of the galss is round shaped.



Circle

Exercise-12

1. Match the names with the figures by drawing lines

	Rectangle
	Equilateral Triangle
	Circle
	Obtuse Triangle
	Square
	Isosceles Triangle

2. Draw an obtuse triangle
3. Draw a rectangle or tectanguler quadrilatral
4. Draw a square or square shaped quadrilateral
5. How many triangles are there in the next figure?