

su **GCE** ss
WITH
MATHS AHEAD



Class 2

Bangladesh edition

Contents



1. 2-Digit Numbers	1	HOTS questions, Fun activity	
• Learning objectives			
• Warm Up			
Recall—tens and ones			
• Grouping numbers			
• Numbers 11–29			
Maths lab activity 1 (concept)			
• Tens and ones			
• Place value			
• Odd and even numbers			
• Skip counting on number line			
• Before, after, between			
• Comparison of numbers			
• Ascending and descending order			
• WORKSHEET for formative assessment			
Hots questions, Fun activity			
2. Addition and Subtraction of 2-Digit Numbers	14	3. 3-Digit Numbers	33
• Learning objectives		• Learning objectives	
• Warm Up		• Warm Up	
Maths lab activity 1 (concept)		Maths lab activity 1 (concept)	
• Properties of addition		• 3-digit numbers on the abacus	
• Addition of 2-digit numbers		Maths lab activity 2 (concept)	
Maths lab activity 2 (concept)		• Hundreds, tens and ones	
• Subtraction of 2-digit numbers		Maths lab activity 3 (concept)	
Maths lab activity 3 (concept)		• Expanded notation	
• Addition with regrouping		• Place value	
Maths lab activity 4 (concept)		• Numbers 101–500	
• Subtraction with regrouping		• Numerals and number names	
Maths lab activity 5 (concept)		• Numerals 501–1000	
• WORKSHEET for formative assessment		• Numbers and number names	
		• Comparing 3-digit numbers	
		WORKSHEET for formative assessment	
		Hots questions, Fun activity	
		4. Addition and Subtraction of 3-Digit Numbers	53
		• Learning objectives	
		• Warm Up	
		Maths lab activity 1 (concept)	
		• 3-digit addition with regrouping	
		Maths lab activity 2 (concept)	
		• 3-digit subtraction	
		Maths lab activity 3 (concept)	
		• 3-digit subtraction with regrouping	
		Maths lab activity 4 (concept)	
		• WORKSHEET for formative assessment	
		MOQA, Hots questions, Fun activity	

5. Time	72	• Learning objectives • Warm Up - Recall - Maths lab activity 1 (concept) • Reading time to the nearest 5 minutes • Half past, quarter past, quarter to • The calendar • WORKSHEET for formative assessment - MCQs, Hots questions, Fun activity
6. Shapes and Patterns	81	• Learning objectives • Warm Up - Recall • Straight and curved sides • Solid shapes - Maths lab activity 1 (concept) - Maths lab activity 2 (skill) • Straight lines and curved lines - Maths lab activity 3 (concept) - Maths lab activity 4 (concept) • Patterns - Maths lab activity 5 (concept) • WORKSHEET for formative assessment - MCQs, Hots questions, Fun activity (project) - Summative Assessment–1 (chapters 1–6)
7. Multiplication	92	• Learning objectives • Warm Up - Recall • Multiplication tables - Maths lab activity 1 (skill) • Multiplication on the number line • Order property of multiplication - Maths lab activity 2 (concept, skill) • Multiply using the tables • Multiplication of a 2- and 3-digit number by a 1-digit number • Multiplying a 2-digit number by a 1-digit number with regrouping • Multiplying a 3-digit number by a 1-digit number with regrouping • Multiplication by 10, 20, 30 • WORKSHEET for formative assessment - MCQs, Hots questions, Fun activity
8. Division	121	• Learning objectives • Warm Up - Maths lab activity 1 (concept) • Dividing into equal groups • Division as repeated subtraction - Maths lab activity 2 (concept) • Division and multiplication are related - Maths lab activity 3 (concept) • Division by using multiplication tables • Long division • Division with remainder - Maths lab activity 4 (concept) • Division with regrouping • WORKSHEET for formative assessment - MCQs, Hots questions, Fun activity
9. Money	141	• Learning objectives • Warm up - Recall—Bangladeshi money • Changing money - Maths lab activity 1 (life skill)



- Conversion of taka to poisa
- Conversion of poisa to taka
- Addition of money
- Subtraction of money
- WORKSHEET for formative assessment
T & F, Hots questions, Fun activity (life skill)

10. Measurement

150

- Learning objectives
- Warm Up
Maths lab activity 1 (skill)
- Standard units
Maths lab activity 2 (concept)
Maths lab activity 3 (concept)
- Measuring lengths
Maths lab activity 4 (life skill)
- Addition and subtraction of length
- Converting metres and centimeters
- Addition of metres and centimeters
- Subtraction of metres and centimeters
- Weight
Maths lab activity 5 (concept)
Maths lab activity 6 (life skill)
- Addition and subtraction of kilograms and grams
- Capacity
Maths lab activity 7 (concept)
- Addition and subtraction of capacity
- WORKSHEET for formative assessment
MCQs, Hots questions, Fun activity (life skill)

11. Fractions

170

- Learning objectives
- Warm Up
Maths lab activity 1 (concept)
- Half
- One-third

Maths lab activity 2 (concept)

- Quarter or one-fourth
Maths lab activity 3 (concept)
- Fractions
- WORKSHEET for formative assessment
MCQs, Hots questions, Fun activity

12. Pictographs

176

- Learning objectives
- Warm Up
- Recall
- Picture graph
- WORKSHEET for formative assessment
Summative Assessment-2
(chapters 7-12)

179

2-Digit Numbers

1

Learning Objectives

You will be able to:

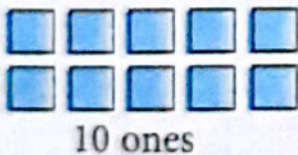
- express 2-digit number as sum of tens and ones.
- recognise odd and even numbers.
- use a number line to skip count and say which number comes before, after or in between.
- compare two 2-digit numbers and say which is greater.
- arrange numbers in ascending and descending order.



Warm Up



Recall—Tens and ones



10 ones



1 ten

Every time you have 10 ones, change them for 1 ten.

12 ones



1 ten and 2 ones.



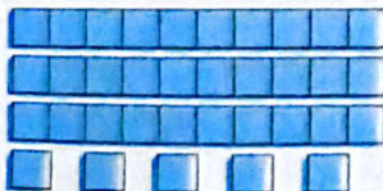
You write

ten
1

ones
2

1 ten and 2 ones is $10 + 2 = 12$

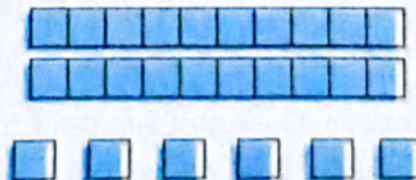
Here we have 3 tens and 5 ones



3 tens and 5 ones is

$$30 + 5 = 35$$

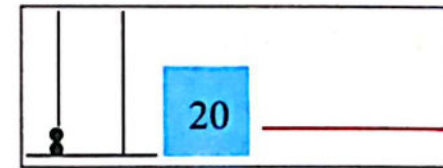
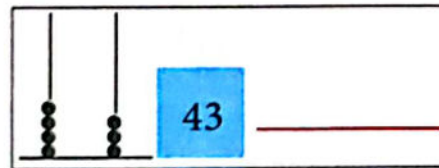
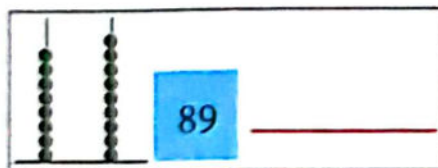
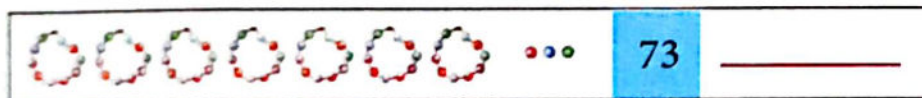
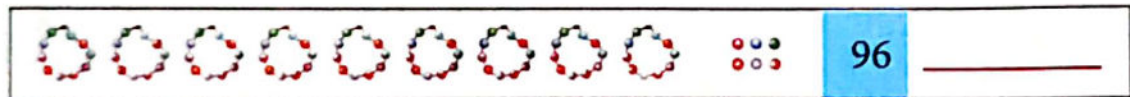
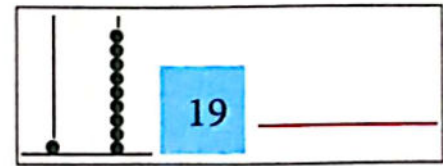
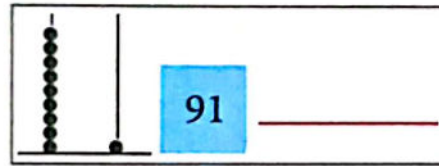
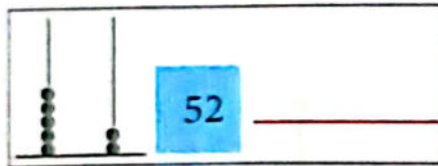
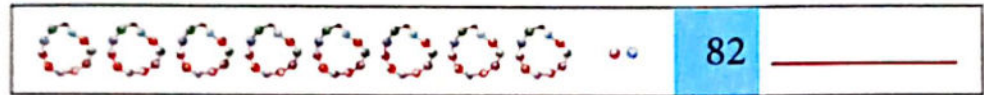
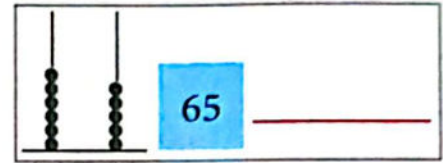
We have 2 tens and 6 ones



2 tens and 6 ones is

$$20 + 6 = 26$$

How many tens are there in these numbers?



Write these numbers as tens and ones.

43 4 tens and 3 ones

25 _____

21 _____

36 _____

68 _____

42 _____

70 _____

92 _____

39 _____

88 _____

52 _____

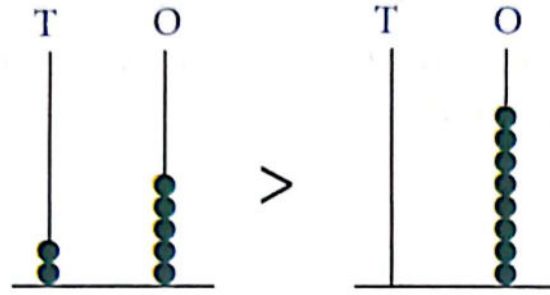
66 _____

• Comparison of numbers

- Compare 25 and 8.

25 has two digits. 8 has one digit.

So, $25 > 8$

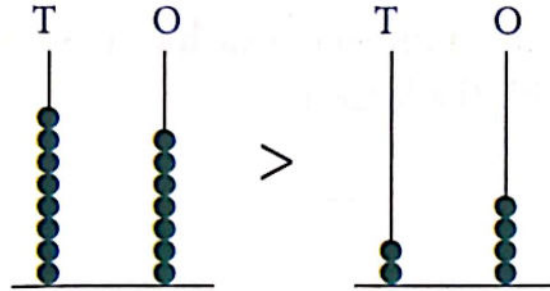


- Compare 87 and 24.

Both numbers have 2 digits.

So, compare the tens digit

$8 > 2$, therefore $87 > 24$



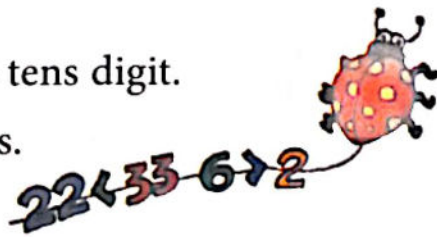
- Compare 67 and 65.

Both number have two digits.

Both numbers also have the same tens digit.

Therefore, compare the ones digits.

$7 > 5$, therefore $67 > 65$



Remember! 😊

$>$ means
greater than

$<$ means
smaller than

Fill in the correct symbol $>$ or $<$.

18 31

34 72

28 82

10 11

15 16

33 44

60 70

36 63

41 14

8 78

24 64

42 16

8 81

75 65

68 58

22 68

85 40

20 29

17 71

31 41

• Word problems

1. There are 25 boys and 23 girls in Class 3A. How many children are there in the class?

Number of boys	=	25
Number of girls	= +	23
Total number of children		<u>48</u>

2. Aasia read 56 pages of a book yesterday. She read 33 pages today, How many pages did she read in the two days?



3. Aalia bought 36 apples and 22 bananas. How many fruits did she buy?

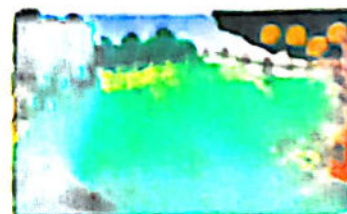


4. In a bus there are 35 boys and 43 girls. How many children are there in the bus?



5. There are 52 chalk pieces in one box and 45 in another box. How many chalk pieces are there in all?

6. In a garden there are 25 mango trees, 32 guava trees and 42 jamun trees. How many trees are there in all in the garden?



7. A fruitseller has 3 baskets. There are 42 fruits in one basket, 34 fruits in the second basket and 23 fruits in the third basket. How many fruits does he have in all?

8. In a box there are 33 blue pencils, 24 red pencils and 40 green pencils. How many pencils are there in the box?



• Subtraction of 2-digit numbers

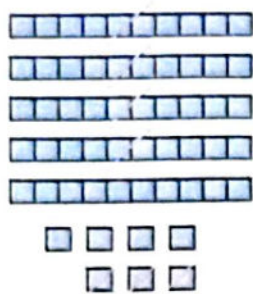


Maths Lab Activity 3

Work out the subtraction of 2-digit numbers on strips of tens and ones as shown below.

Subtract

	T	O
	5	7
-	4	3
	1	4



Step 1: Subtract the ones

$$7 \text{ ones} - 3 \text{ ones} = 4 \text{ ones.}$$

Write 4 in the ones column.

Step 2: Subtract the tens

$$5 \text{ tens} - 4 \text{ tens} = 1 \text{ ten.}$$

Write 1 in the tens column.

To the teacher: Let children work out some of the subtraction sums on the tens and ones strips and then on paper.

Subtract

	T	O
	4	4
-	2	1
	2	3

	T	O
	5	6
-	2	5

	T	O
	3	7
-	1	4

	T	O
	4	0
-	3	0

	T	O
	2	8
-	1	6

	T	O
	3	9
-	1	8

	T	O
	5	9
-	3	6

	T	O
	6	3
-	2	2

	T	O
	7	2
-	1	2

	T	O
	8	5
-	2	3

	T	O
	8	9
-	7	7

	T	O
	7	5
-	6	1

	T	O
	8	4
-	3	1

	T	O
	5	3
-	1	1

	T	O
	7	7
-	6	6

	T	O
	9	6
-	2	3

	T	O
	9	8
-	8	7

	T	O
	9	1
-	6	0

	T	O
	9	9
-	7	8

	T	O
	8	7
-	7	7

Write down the number for each sum.

$300 + 50 + 7 = \boxed{}$

$400 + 20 + 5 = \boxed{}$

$600 + 70 + 7 = \boxed{}$

$700 + 20 = \boxed{}$

$800 + 90 = \boxed{}$

$900 + 90 + 3 = \boxed{}$

$300 + 70 + 2 = \boxed{}$

$400 + 40 + 4 = \boxed{}$

$500 + 60 + 8 = \boxed{}$

$600 + 10 + 2 = \boxed{}$

$600 + 1 = \boxed{}$

$800 + 80 + 8 = \boxed{}$

You know that $435 = 400 + 30 + 5$. Now, write down these in the same way.

$358 = \boxed{} + \boxed{} + \boxed{}$

$783 = \boxed{} + \boxed{} + \boxed{}$

$605 = \boxed{} + \boxed{} + \boxed{}$

$884 = \boxed{} + \boxed{} + \boxed{}$

$950 = \boxed{} + \boxed{} + \boxed{}$

$986 = \boxed{} + \boxed{} + \boxed{}$

$468 = \boxed{} + \boxed{} + \boxed{}$

$596 = \boxed{} + \boxed{} + \boxed{}$

$747 = \boxed{} + \boxed{} + \boxed{}$

$749 = \boxed{} + \boxed{} + \boxed{}$

$838 = \boxed{} + \boxed{} + \boxed{}$

$926 = \boxed{} + \boxed{} + \boxed{}$

• Numbers 401–500

Fill in the missing numbers.

	402								
411								419	
			424						
					436				
	442								450
		453							
				465					
						477			
		383					488		
	492								

$\begin{array}{r} \text{H T O} \\ 202 \\ + 331 \\ + 425 \\ \hline \end{array}$	$\begin{array}{r} \text{H T O} \\ 320 \\ + 202 \\ + 260 \\ \hline \end{array}$	$\begin{array}{r} \text{H T O} \\ 225 \\ + 204 \\ + 260 \\ \hline \end{array}$	$\begin{array}{r} \text{H T O} \\ 153 \\ + 342 \\ + 104 \\ \hline \end{array}$	$\begin{array}{r} \text{H T O} \\ 323 \\ + 232 \\ + 111 \\ \hline \end{array}$
$\begin{array}{r} \text{H T O} \\ 286 \\ + 102 \\ + 310 \\ \hline \end{array}$	$\begin{array}{r} \text{H T O} \\ 333 \\ + 111 \\ + 222 \\ \hline \end{array}$	$\begin{array}{r} \text{H T O} \\ 100 \\ + \quad 1 \\ + \quad 11 \\ \hline \end{array}$	$\begin{array}{r} \text{H T O} \\ 405 \\ + 303 \\ + 210 \\ \hline \end{array}$	$\begin{array}{r} \text{H T O} \\ 666 \\ + 232 \\ + 111 \\ \hline \end{array}$
$\begin{array}{r} \text{H T O} \\ 722 \\ + 134 \\ + \quad 42 \\ \hline \end{array}$	$\begin{array}{r} \text{H T O} \\ 929 \\ + \quad 50 \\ + \quad 20 \\ \hline \end{array}$	$\begin{array}{r} \text{H T O} \\ 123 \\ + 456 \\ + 210 \\ \hline \end{array}$	$\begin{array}{r} \text{H T O} \\ \quad 12 \\ + 345 \\ + 610 \\ \hline \end{array}$	$\begin{array}{r} \text{H T O} \\ 323 \\ + 232 \\ + 131 \\ \hline \end{array}$

• 3-digit addition with regrouping



Maths Lab Activity 2

- Look at the two numeral cards.

237

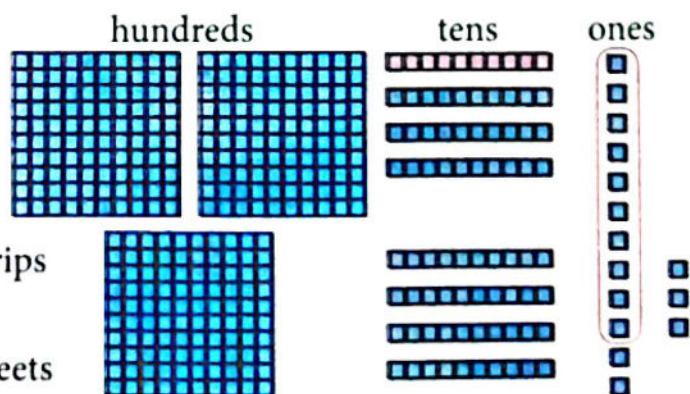
148

- Take out hundreds sheets, tens strips and ones slips to show the numbers above.
- Add the ones slips: 7 slips and 8 slips = 15 slips.
- Out of the 15, put together 10 ones slips and make 1 tens strip. There are 5 slips remaining.

15 ones = 1 ten and 5 ones

- Now add the tens strips:
3 strips, 4 strips and 1 strip = 8 strips
- Now add the hundreds
sheets: 2 sheets and 1 sheet = 3 sheets

We therefore have 3 hundreds + 8 tens + 5 ones = 385



• The calendar

Gopal is six years old. After one year he will be seven years old.

One year has 12 months.

Can you fill in the blanks to find their names? The number of days in each month are also given.

First month	J A _ U A R _	31 days
Second month	F E B _ U A _ Y	28 or 29 days
Third month	M _ R _ H	31 days
Fourth month	A _ R I _	30 days
Fifth month	M _ Y	31 days
Sixth month	J _ N _	30 days
Seventh month	J _ L _	31 days
Eighth month	A U _ U _ T	31 days
Ninth month	S E _ T E _ B E _	30 days
Tenth month	O _ T _ B _ R	31 days
Eleventh month	N _ V _ M _ E _	30 days
Twelfth month (Last month)	D E C _ M _ E _	31 days

In most years February has 28 days.

But in a leap year it has 29 days.

A leap year comes after every four years.

There are 365 days in a year but a leap year has 366 days.

These are leap years.

2000

2004

2008

2012

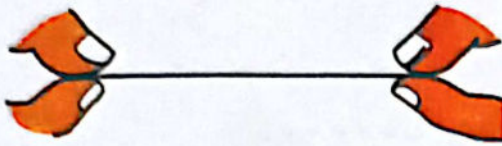
2016

2020

• Straight lines and curved lines



Maths Lab Activity 3



Pull a piece of string tightly between your hands.
It gives you a straight line.



Now bring the two hands closer.
It gives you a curved line.

You can use the edge of a book to draw a straight line.



You can also use a ruler to draw a straight line.



Start from 0.

Draw a line as long as you require.



Here, we have drawn a 6 cm line.



Maths Lab Activity 3

Use a ruler to join the mother with the child. What kind of lines do you get?



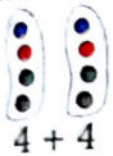
4 times table



1 group of 4

1 four = 4

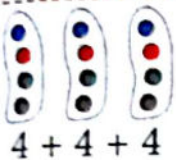
$1 \times 4 = 4$



2 groups of 4

2 fours = 8

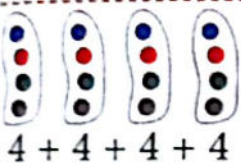
$2 \times 4 = 8$



3 groups of 4

3 fours = 12

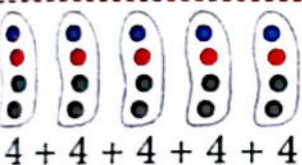
$3 \times 4 = 12$



4 groups of 4

4 fours = 16

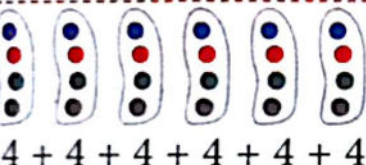
$4 \times 4 = 16$



5 groups of 4

5 fours = 20

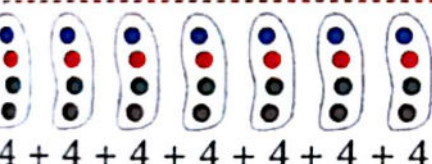
$5 \times 4 = 20$



6 groups of 4

6 fours = 24

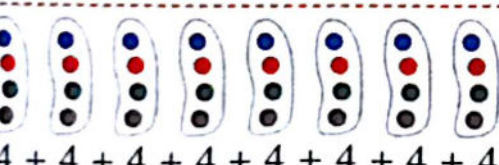
$6 \times 4 = 24$



7 groups of 4

7 fours = 28

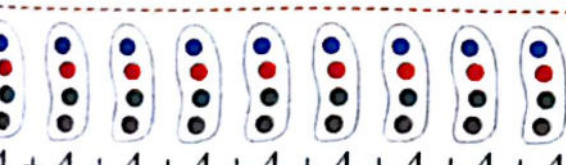
$7 \times 4 = 28$



8 groups of 4

8 fours = 32

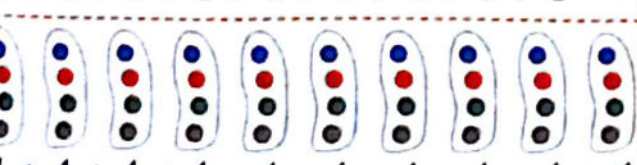
$8 \times 4 = 32$



9 groups of 4

9 fours = 36

$9 \times 4 = 36$



10 groups of 4

10 fours = 40

$10 \times 4 = 40$

6. How many cricket-balls are there if there are 11 boxes of 30 balls each?



7. There are 64 eggs in a carton. How many eggs are there in 9 cartons?



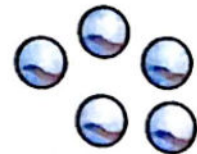
8. There are 7 days in a week. How many days are there in 52 weeks?



9. A milkman sells milk in 4 lanes every day. Each lane has 124 houses. How many houses does he sell milk to every day?



10. Ali has 112 marbles. Aamir has 3 times the number of marbles that Ali has. How many marbles does Aamir have?



11. A shopkeeper has 7 packets of stamps. If each packet has 75 stamps, how many stamps are there altogether?

12. A group of people hired 6 buses to go on a tour. Each bus carried 105 people. How many people went on the tour?



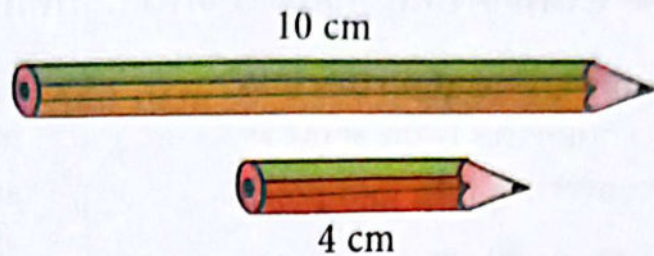
Here are two pencils.

One is 10 cm long.

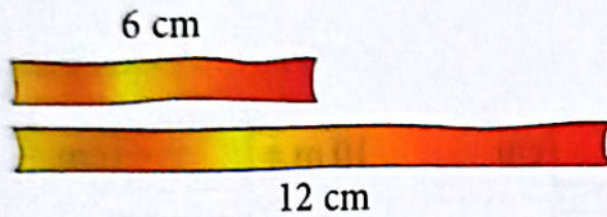
The other is 4 cm long.

The difference in their lengths is

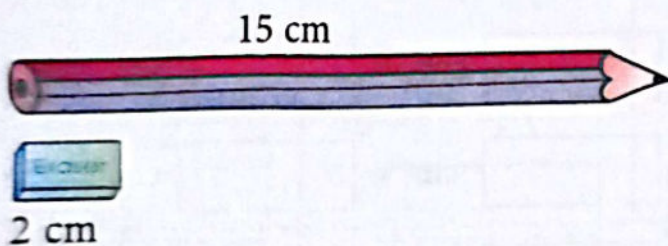
$$10 \text{ cm} - 4 \text{ cm} = 6 \text{ cm}$$



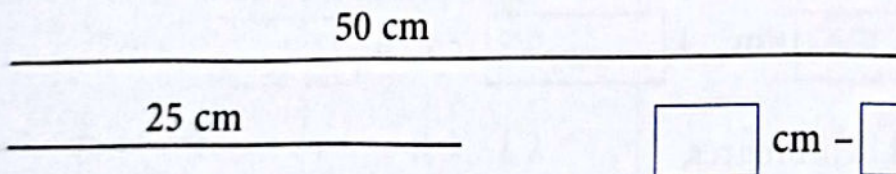
Find the difference between these measurements:



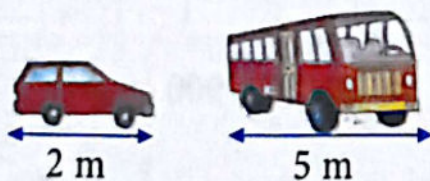
$$12 \text{ cm} - 6 \text{ cm} = \boxed{} \text{ cm}$$



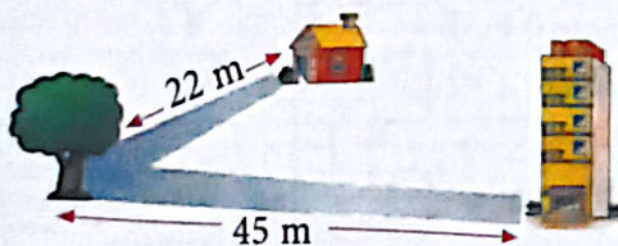
$$15 \text{ cm} - 2 \text{ cm} = \boxed{} \text{ cm}$$



$$\boxed{} \text{ cm} - \boxed{} \text{ cm} = \boxed{} \text{ cm}$$



$$5 \text{ m} - 2 \text{ m} = \boxed{} \text{ m}$$



$$\boxed{} \text{ m} - \boxed{} \text{ m} = \boxed{} \text{ m}$$