

1



Numbers up to 200

Learning Outcomes

At the end of this lesson, you will be able to:

- read and write numbers up to 200 and state their sequence.
- state the place values of the digits in numbers up to 200.
- write numbers up to 200 in the expanded form.
- compare numbers up to 200 and arrange them in ascending/descending order.
- distinguish between odd and even numbers.
- point out the ordinal numbers for things in a sequence.



GET STARTED

Numbers in real life

Three friends, Nita, Bali and Ramesh collect marbles. They put their marbles neatly in small boxes. Each box can have 10 marbles.

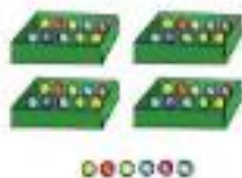
How many marbles does each have?



Nita: _____



Bali: _____



Ramesh: _____







Who has the most marbles? _____

Who has the least number of marbles? _____

Check what you know

1. Write the number and number name.

- a) 6 tens and 7 ones = _____
- b) 2 tens and 8 ones = _____
- c) 4 tens = _____
- d)  = _____
- e)  = _____
- f)  = _____
- g)  = _____

2. Write the numbers.

- | | Before | After | | Between | | | |
|----|--------|-------|-------|---------|-------|-------|----|
| a) | _____ | 40 | _____ | d) 30 | _____ | 32 | |
| b) | _____ | 76 | _____ | e) | 14 | _____ | 16 |
| c) | _____ | 22 | _____ | f) | 33 | _____ | 35 |

3. Compare the numbers. Circle the bigger number.

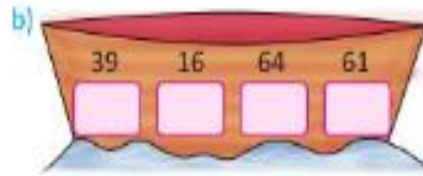
- a) 79 42 b) 36 43 c) 45 9 d) 63 62
- e) 31 36 f) 8 77 g) 39 44 h) 99 90

4. Tick the greatest number and cross out the smallest number.

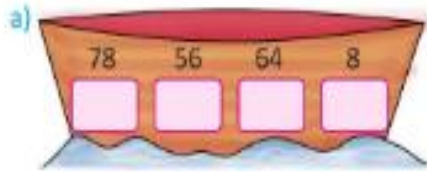
- a) 14 19 8 79 27
- b) 37 89 70 82 26
- c) 44 58 95 86 18



5. Write in increasing (ascending) order.



6. Write in decreasing (descending) order.



CONCEPTS SECTION

◆ Place value

43 is a **2-digit number**. It has two digits 4 and 3.

In 43, 4 is in the **tens place** and 3 is in the **ones place**.

This is an abacus.

It has a stick of tens and a stick of ones.



43 = 4 tens and 3 ones is shown on the abacus as:



In 43:

4 has a value of **4 tens** or **40**.

3 has a value of **3 ones** or **3**.

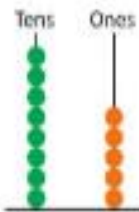
We say that:

The place value of 4 in 43 is **40**.

The place value of 3 in 43 is **3**.



This abacus shows 85.

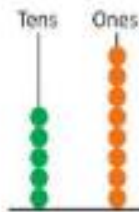


$85 = 8 \text{ tens and } 5 \text{ ones}$

The place value of 8 in 85 is 80.

The place value of 5 in 85 is 5.

This abacus shows 58.



$58 = 5 \text{ tens and } 8 \text{ ones}$

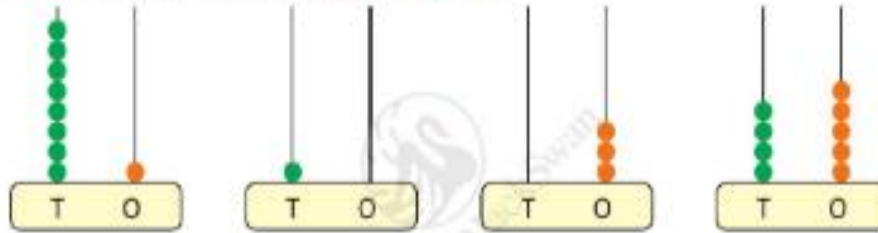
The place value of 5 in 58 is 50.

The place value of 8 in 58 is 8.

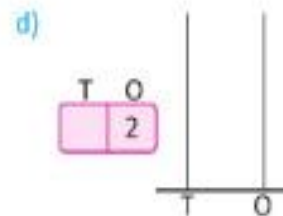
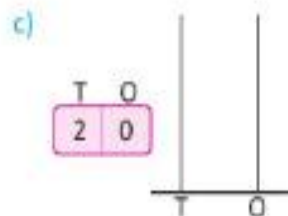
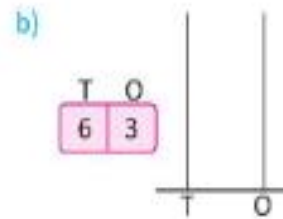
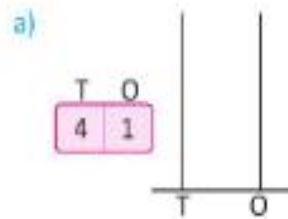


EXERCISE 1

1. Write the numbers shown on the abacus.



2. Show the numbers on the abacus.



3. In each number, write the place value of the digit in red.

a) 62 _____

b) 26 _____

c) 78 _____

d) 30 _____

e) 71 _____

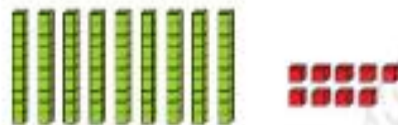
f) 11 _____

◆ One hundred

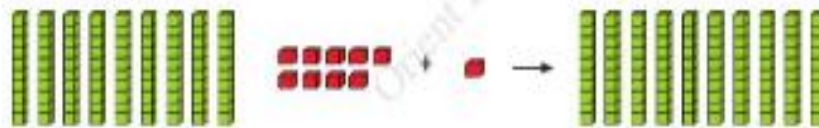
You know that:



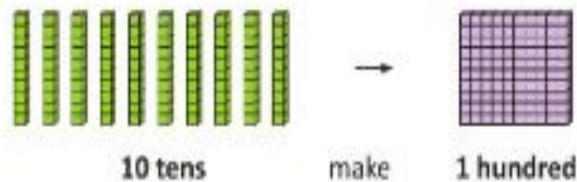
99 can be shown as:



Add 1 one to 99. You get 10 tens.

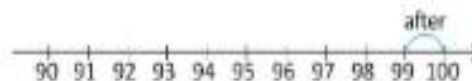


10 tens together make 1 hundred or 100.

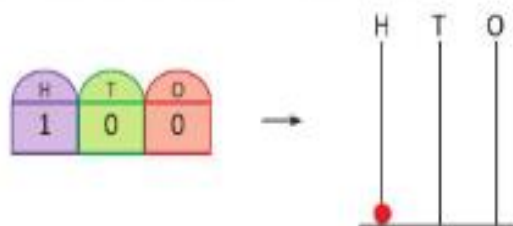


100 is a 3-digit number.

100 comes after 99 on a number line.



It can be shown on an abacus with 3 sticks.



H stands for hundreds.
T stands for tens.
O stands for ones.



The place value of **1** in 100 is **100**.

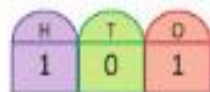
◆ Building numbers up to 200

Riya has 100 stamps.

Her mother gave her 1 more.

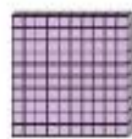
Now, she has $100 + 1 = 101$.

101 has 1 hundred, 0 tens and 1 one.

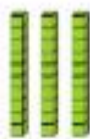


The number name for 101 is **one hundred one**.

Riya counts her stamps after every few days. Let us help her count them.



1 hundred



3 tens



2 ones

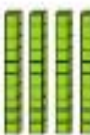
is



It is written as **132** and read as **one hundred thirty-two**.



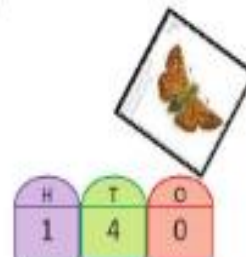
1 hundred



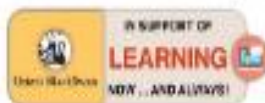
4 tens

0 ones

is



It is written as **140** and read as **one hundred forty**.





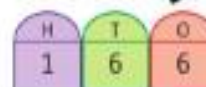
1 hundred



6 tens



6 ones is



It is written as **166** and read as **one hundred sixty-six**.



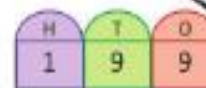
1 hundred



9 tens



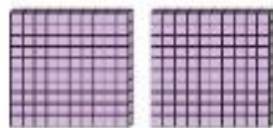
9 ones is



It is written as **199** and read as **one hundred ninety-nine**.

Riya's father gives her 1 more stamp.

She now has:



2 hundreds

0 tens

0 ones =



It is written as **200** and read as **two hundred**.

Reading a 3-digit number

To read a 3-digit number:

- Read the hundreds digit first.
- Then, read the tens and ones digits together.

149
one hundred forty-nine



160
one hundred sixty

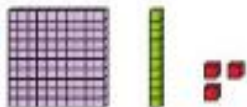

109
one hundred nine


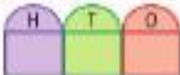
(Refer Maths Lab Activity on page 21)

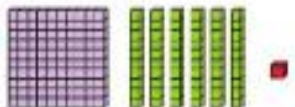

EXERCISE 2

1. Write the numbers and number names.


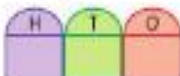
a)   one hundred thirty-seven

b)   _____

c)   _____

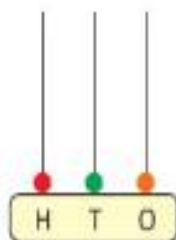
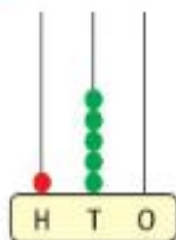
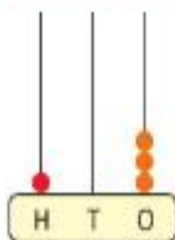
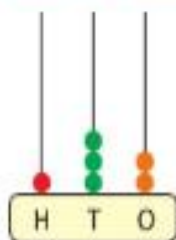
d)   _____

e)   _____

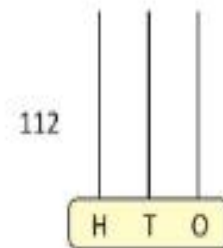
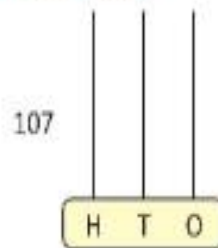
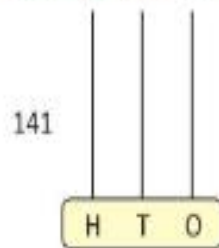
f)   _____

EXERCISE 3

1. Write the numbers shown on the abacus.



2. Show the given numbers on the abacus.



◆ Before, between and after

EXERCISE 4



1. Write the number that comes after

- a) 101 _____ b) 122 _____ c) 111 _____
d) 170 _____ e) 136 _____ f) 199 _____

2. Write the number that comes before

- a) _____ 160 b) _____ 189 c) _____ 110
d) _____ 133 e) _____ 121 f) _____ 200

3. Write the number that comes between

- a) 139 _____ 141 b) 111 _____ 113 c) 188 _____ 190
d) 126 _____ 128 e) 100 _____ 102 f) 157 _____ 159

◆ Place value

156 is a 3-digit number.

1 is in the hundreds place. Its place value in 156 is 1 hundred or 100.

5 is in the tens place. Its place value in 156 is 5 tens or 50.

6 is in the ones place. Its place value in 156 is 6 ones or 6.



EXERCISE 5

1. Write the place values of

- a) 4 in 104 _____ b) 6 in 160 _____ c) 5 in 154 _____
d) 1 in 123 _____ e) 1 in 100 _____ f) 9 in 189 _____

◆ Expanded form

156 = 1 hundred + 5 tens + 6 ones = 100 + 50 + 6

This is called the **expanded form** of 156.



EXERCISE 6

1. Write the expanded form.

- a) 134 = _____ hundred + _____ tens + _____ ones = _____ + _____ + _____
b) 108 = _____
c) 146 = _____
d) 190 = _____
e) 85 = _____

2. Fill in the blanks.

- a) 1 hundred + 4 tens + 6 ones = **146** b) 100 + 40 + 9 = **149**
c) 1 hundred + 5 tens + 2 ones = _____ d) 100 + 20 + 1 = _____
e) 1 hundred + 9 tens + 0 ones = _____ f) 100 + 70 + 8 = _____
g) 0 hundreds + 0 tens + 8 ones = _____ h) 100 + 3 = _____
i) 1 hundreds + 0 tens + 5 ones = _____ j) 100 + 50 = _____



◆ Comparing 3-digit numbers

Comparing numbers with different number of digits

A number with higher number of digits is always greater.



Example 1: Compare 49 and 162.

49 has 2 digits 162 has 3 digits

Therefore, 162 **is greater than** 49. We write this as: $162 > 49$

Also, 49 **is smaller than** 162. We write this as: $49 < 162$

The symbol $>$ means '**greater than**'. The symbol $<$ means '**smaller than**'.

EXERCISE 7

1. Compare the numbers by counting the number of digits.

a) $128 \bigcirc 89$

b) $156 \bigcirc 72$

c) $80 \bigcirc 149$

d) $8 \bigcirc 56$

e) $90 \bigcirc 190$

f) $68 \bigcirc 186$

Comparing numbers with same number of digits

Example 2: Compare 195 and 142.

Step 1: Compare the number of digits.
Both numbers have 3 digits.

Step 2: Compare the **hundreds** digit. It is the same.

195
142

Step 3: Compare the **tens** digit.
9 is bigger than **4**.
Therefore, $195 > 142$, or
 $142 < 195$.

EXERCISE 8

1. Compare the numbers by comparing the tens digits.

a) $137 < 140$

b) $147 \bigcirc 158$

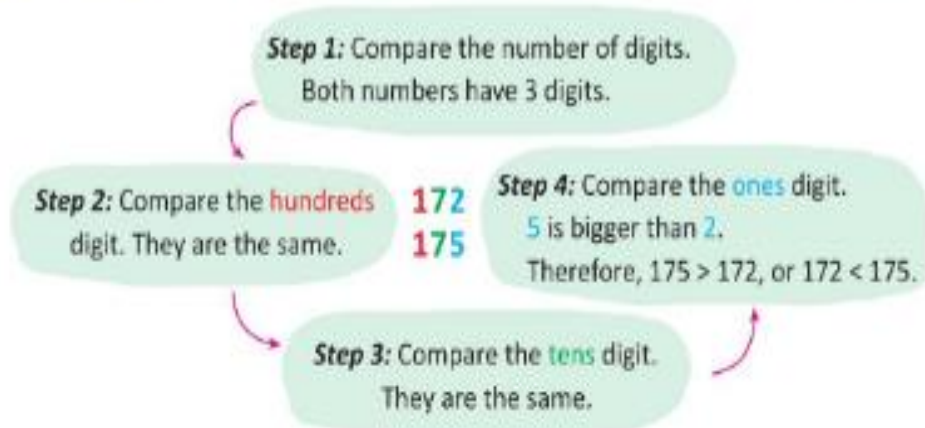
c) $155 \bigcirc 149$

d) $98 \bigcirc 90$

e) $109 \bigcirc 191$

f) $176 \bigcirc 167$

Example 3: Harjit has 172 marbles and Abdul has 175 marbles. Who has more?



Since $175 > 172$, Abdul has more marbles.

EXERCISE 9

1. Compare the numbers by comparing the ones digits.

- a) 171 ○ 177 b) 135 ○ 133 c) 180 ○ 189
d) 145 ○ 147 e) 111 ○ 110 f) 199 ○ 196

EXERCISE 10

1. Compare the numbers.

- a) 137 ○ 182 b) 142 ○ 148 c) 44 ○ 144
d) 196 ○ 169 e) 96 ○ 101 f) 157 ○ 200
g) 108 ○ 180 h) 9 ○ 111 i) 19 ○ 91

2. Circle the greatest number.

- a) 48, 150, 101 b) 149, 194, 94 c) 100, 200, 199
d) 131, 141, 111 e) 107, 170, 117 f) 59, 95, 105

3. Circle the smallest number.

- a) 9, 11, 111 b) 136, 163, 36 c) 100, 101, 110
d) 48, 136, 99 e) 128, 107, 140 f) 9, 8, 98



◆ **Increasing and decreasing order**

Increasing order
(from smallest to biggest)



Increasing order is also called **ascending order**.

Decreasing order
(from biggest to smallest)



Decreasing order is also called **descending order**.

Example 1: Arrange in increasing order (ascending order): 82, 194, 136

Write the smallest number first: 82

Then, write the smaller of the remaining two numbers: 82, 136

Write the biggest number last: 82, 136, 194

Example 2: Arrange in decreasing order (descending order): 146, 99, 185

Write the biggest number first: 185

Then, write the bigger of the remaining two numbers: 185, 146

Write the smallest number last: 185, 146, 99



EXERCISE 11

1. Arrange in ascending order.

a) 38, 159, 136 _____ b) 167, 162, 126 _____

c) 136, 74, 90 _____ d) 184, 181, 182 _____

2. Arrange in descending order.

a) 57, 112, 62 _____ b) 182, 108, 180 _____

c) 110, 77, 140 _____ d) 166, 152, 165 _____

◆ **Odd and even numbers**

You have shoes in pairs.



Count the number of shoes each child has. Ring them in pairs.

Write 'Yes' if pairs can be formed. Write 'No' if pairs cannot be formed.

Name	Shoes	Number of shoes	Can pairs be formed?
Mohit			
Radha			
Aslam			
Harinder			
Ganga		5	No
Nancy			
Asim			
Sanjay			
Poornima			
Naseem			

Numbers that can be put into pairs are called **even numbers**.

2, 4, 6, 8 and 10 are even numbers.

Even numbers have 0, 2, 4, 6, or 8 in their ones place. 30, 12, 34, 56 and 78 are even numbers.

Numbers that cannot be put into pairs are **odd numbers**.

1, 3, 5, 7, and 9 are odd numbers.

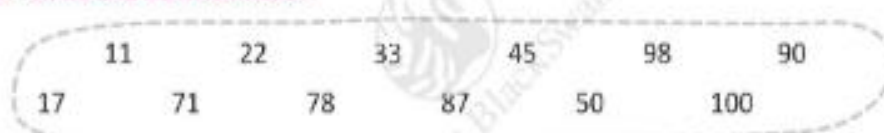
Odd numbers have 1, 3, 5, 7 or 9 in the ones place. 21, 43, 65, 57 and 89 are odd numbers.

EXERCISE 12

1. Circle the even numbers.



2. Circle the odd numbers.



Good to know

The number after an even number is an odd number.

The number after an odd number is an even number.



◆ Ordinal numbers

The children of class 2 are racing.



Who is first? _____ Who is second? _____
 Who is third? _____ Who is fourth? _____
 Who is fifth? _____ Who is sixth? _____
 Who is seventh? _____ Who is eighth? _____
 Who is ninth? _____ Who is tenth? _____

First, second, third,.....are called **ordinal numbers**.

Ordinal numbers show the order or position of things.

They are also written as:

First – 1st	Second – 2nd	Third – 3rd	Fourth – 4th	Fifth – 5th
Sixth – 6th	Seventh – 7th	Eighth – 8th	Ninth – 9th	Tenth – 10th

EXERCISE 13

1. Look at the children standing in a line to drink water.

Write their positions in the line using ordinal numbers 1st, 2nd,...



2. Write the position of the letters in the words.

- | | |
|--------------------------|------------------------|
| a) M in MOHIT <u>1st</u> | b) H in RADHA _____ |
| c) E in HARINDER _____ | d) A in POORNIMA _____ |

SKILLS SECTION (calculation, application and analysing skills)



Mental Maths

1. Write the number for 2 hundreds. _____
2. Write the number for 7 tens and 6 ones. _____
3. Minal has 189 cards. Shruti has 123 cards.
Who has more cards? _____
4. What is 1 more than 99? _____
5. What is 1 less than 200? _____

Mixed Bag

1. Write the numbers from 101 to 200.

101								110
111								
								130
161								
								190

2. Write the numbers and number names.

a)  _____

b)  _____

c) $99 + 1$ _____

d)  _____

e) 1 hundred + 6 tens + 1 one _____

f) $100 + 80 + 9$ _____

3. Write the numbers.

a) From 149 to 159

149										159
-----	--	--	--	--	--	--	--	--	--	-----

b) From 185 to 195

--	--	--	--	--	--	--	--	--	--	--

4. Write the number that comes before and after.

a) _____ 103 _____ b) _____ 169 _____ c) _____ 100 _____

d) _____ 197 _____ e) _____ 155 _____ f) _____ 121 _____

5. Write the number that comes between.

a) 111 _____ 113 b) 168 _____ 170 c) 190 _____ 192

d) 143 _____ 145 e) 99 _____ 101 f) 198 _____ 200

6. Applying numbers (story sums)

a) Manav has read 152 pages of a book. Which page does he have to read next?

b) Raju is reading page 101 of a book. Which page did he read before 101?

- c) Toto the tortoise is 110 years old. How old will he be on his next birthday?
 d) Toto the tortoise is 110 years old. How old was he last year?

7. Put the sign $>$, $<$ or $=$ in the box.

- a) 197 97 b) 102 120 c) 195 109
 d) 12 21 e) 141 141 f) 90 102
 g) 145 143 h) 155 15 i) 167 176

8. a) Four tortoises Ta, Tu, To and Ti have the following ages.

Ta – 140 Tu – 121 To – 138 Ti – 112

Who is the oldest tortoise? Who is the youngest?



b) Teacher gave the same story book to 4 children. The number of pages read by them are:

Rajan – 111 Rajni – 131 Mala – 113 Shuja – 133

Who read the most number of pages? Who read the least?



9. Arrange the numbers in ascending order and descending order.

	Ascending	Descending
a) 154 175 96 138	<hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/>
b) 179 159 101 158	<hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/>
c) 139 172 193 140	<hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/>
d) 100 50 150 200	<hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/>

10. a) Write the next **even** number.

			
56	42	98	80

b) Write the next **odd** number.

			
81	29	65	77

11. Five children got the following marks out of 200 in science and maths.

Deepa – 185 Raj – 170 Rupa – 148
Preeti – 169 Neha – 101

Fill in the card to show their rank in science and maths.

Rank	Name	Marks
1st		
2nd		
3rd		
4th		
5th		

Higher Order Thinking Skills

Raman's building is 5 floors high. All even numbered floors have 2 flats. All odd numbered floors have 3 flats. How many flats are there in Raman's building?



Cross-curricular Practice

Find out: Whether your date of birth is an odd or even number.

Whether your home telephone number is an odd or even number.



Everyday Maths

1. Neeta got 98 out of 100 in her Maths test. Her teacher had made a mistake in adding. She had given her 1 extra mark. Neeta told her teacher. Her marks were then reduced by 1.

Teacher praised her honesty in front of the whole class. Neeta was very happy. Think! Would you have done the same?

2.



I hope she has enough money to buy me.



Neeta has two notes of ₹ 100 each. Does she have enough money to buy the teddy bear?

ACTIVITIES SECTION




Maths Lab Activity

Objective: To consolidate the concept of hundreds, tens and ones using concrete objects.

Materials required: Square ruled sheets, card sheets.

Method: Mark out the following on square ruled sheets:

- 10×10 squares for hundreds
- 10×1 rectangles for tens
- Single squares for ones

		
Hundreds 10×10	Tens 10×1	Ones 1

Step 1: Let children work in groups. Give 2 hundreds, 9 tens and 9 ones to each group. Let children cut these out and paste them on card sheets.

Step 2: Show them a number card, say 167. Ask them to use the hundreds, tens and ones to make the number.

Step 3: Let them say, '1 hundred, 6 tens and 7 ones make 167'.

Repeat with other numbers.

Fun Activity

Colour the ducks with odd number answers in yellow and ducks with even number answers in pink.



WORKSHEET

1. Write the number:



2. a) Write the number before and after: _____ 162 _____

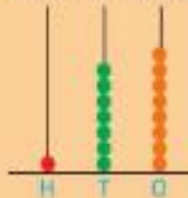
b) Write the number between: 146 _____ 148

3. Compare the numbers. Fill in the blanks with =, > or <.

a) 132 _____ 45

b) 89 _____ 101

1. Write the number:



2. a) Write the number before and after: _____ 189 _____

b) Write the number between: 159 _____ 161

3. Compare the numbers. Fill in the blanks with =, > or <.

a) 145 _____ 154

b) 189 _____ 109



1. Write the number: 6 tens 0 ones 9 hundreds _____



2. Manu is reading page 144 of a book that has 200 pages. Which page did he read just before page 144?

3. a) Arrange in ascending order:

56, 165, 122, 112 _____

b) Arrange in descending order:

119, 199, 109, 99 _____

