

# max maths primary

A SINGAPORE APPROACH

Workbook

5



INTERNATIONAL CURRICULUM

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Macmillan Education  
4 Crinan Street  
London, N1 9XW  
A division of Macmillan Publishers Limited

Companies and representatives throughout the world

www.macmillanic.com

ISBN 978-1-380-01790-1

Text © Macmillan Publishers Limited and Star Publishing Pte Ltd 2018  
Based on *Star Mathematics 5A Workbook* © Star Publishing Pte Ltd, Daniel Cole and  
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First published 2018

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Page layout, illustrations and picture research by Star Publishing Pte Ltd  
Cover design by Macmillan Education  
Cover illustration by Daniel Limon/Beehive Illustration Ltd

Printed and bound in Spain

2022 2021 2020 2019 2018  
10 9 8 7 6 5 4 3 2 1

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# Contents

## Preface

vi

1

## Numbers up to 1 000 000

2

Practice 1: Numbers up to 1 000 000

2

Practice 2: Comparing and ordering numbers within 1 000 000

8

Practice 3: Multiplying numbers by 10 or 100

15

Practice 4: Positive and negative numbers

17

Practice 5: Number patterns

21

2

## Addition and subtraction

22

Practice 1: Addition of more than 2 numbers

22

Practice 2: Subtraction of more than 2 numbers

30

Practice 3: Adding and subtracting near multiples of 10 and 100

34

Practice 4: Calculating the difference between two near multiples of 1 000

38

Practice 5: Written methods

40

3

## Geometry

44

Practice 1: Angles review

44

Practice 2: Angles on a straight line

49

Practice 3: Triangles review

53

Practice 4: Parallel lines

57

Practice 5: Perpendicular lines

60

Practice 6: Creating patterns with 2 lines of symmetry

63

Practice 7: Reflective and rotational symmetry

66

Practice 8: Review of 3D shapes

68

Practice 9: Review of nets of solids

69

4

## Multiplication

70

Practice 1: Multiplication review

70

Practice 2: Multiplying multiples of 10 to 90 and multiples of 100 to 900  
by a single-digit number

74

Practice 3: Multiplying by 19 or 21 mentally

75

Practice 4: Multiplying by 25 mentally

77

Practice 5: Using factors to multiply

79

Practice 6: Multiplying by a 2-digit number

81

Practice 7: Word problems

90

Practice 8: Mixed operations with a pair of brackets

94



## **Division**

**99**

Practice 1: Dividing 3-digit numbers by 1-digit numbers	99
Practice 2: Division word problems	102
Practice 3: Dividing with a remainder	106
Practice 4: Expressing a remainder as a fraction	108
Practice 5: Rounding up or down after division depending on the context	109



## **Area and perimeter**

**110**

Practice 1: Perimeter of shapes	110
Practice 2: Area	113
Practice 3: Word problems	119



## **Time**

**122**

Practice 1: Time review	122
Practice 2: The 24-hour clock	125
Practice 3: Word problems	131



## **Fractions**

**134**

Practice 1: Review of equivalent fractions	134
Practice 2: Review of decimal and fractional equivalence	136
Practice 3: Improper fractions and mixed numbers	138
Practice 4: Ordering numbers on a number line	141
Practice 5: Review of fractions of shapes	142
Practice 6: Review of finding fractions of numbers	146
Practice 7: Fractions as division	149
Practice 8: Proportion	151
Practice 9: Ratio	153



## **Decimals**

**155**

Practice 1: Review of decimals	155
Practice 2: Deriving pairs of decimals with a total of 10	157
Practice 3: Doubling and halving decimal numbers	159
Practice 4: Ordering decimals	160
Practice 5: Rounding off decimals	163
Practice 6: Written calculations using decimals	164
Practice 7: Word problems	170



## **Percentages**

**173**

Practice 1: Percentages

173



## **Length, mass and volume**

**179**

Practice 1: Review of units of length, mass and volume

179

Practice 2: Length, mass and volume in decimal form

183

Practice 3: Ordering measurements in mixed units

187

Practice 4: Review of measuring length, mass and volume

189

Practice 5: Interpreting a reading that lies between two divisions on a scale

190

Practice 6: Measuring lines to the nearest centimetre and millimetre

193



## **Data handling**

**198**

Practice 1: Reading and constructing graphs

198

Practice 2: Describing the occurrence of familiar events

208



## **Position and movement**

**211**

Practice 1: Reading and plotting coordinates

211

Practice 2: Reflection

214

Practice 3: Translation

216

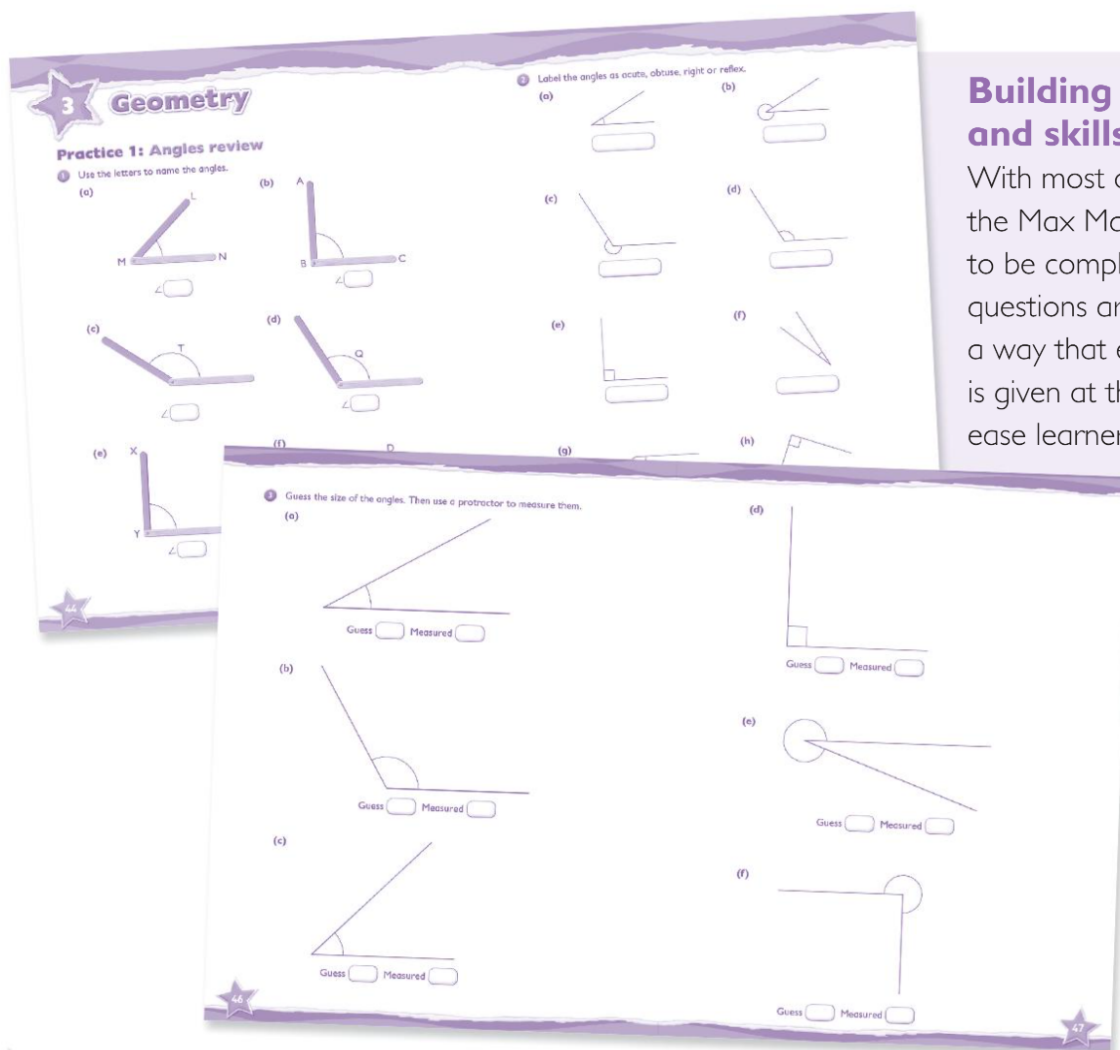


# Preface

**max maths** Primary – **A Singapore Approach** is a mathematics course specially designed to meet the needs of learners following the **Cambridge Primary** curriculum framework in Stages 1 to 6.

The **Max Maths Primary** workbooks guide learners through key mathematical concepts, addressing the learning objectives in the **Cambridge Primary** curriculum framework. With plenty of scaffolded practice, the workbooks support the learning process at home and will help to further develop learners' enthusiasm towards learning.

## Workbook features



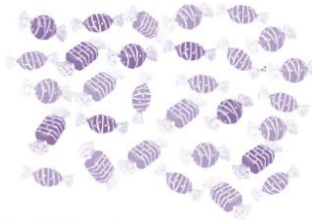
### Building on concepts and skills

With most of the activities in the Max Maths workbooks to be completed at home, questions are scaffolded in a way that extra support is given at the beginning to ease learners into the task.

## Engaging photographs and illustrations

Rich illustrations and photographs help to engage learners and encourage an enthusiastic approach to learning mathematics.

- 1 Look at this set of purple and black sweets. Estimate the proportion of purple sweets.



I estimate the proportion of black sweets to be approximately .

- 2 Look at this set of flowers. Estimate the proportion of purple flowers.



I estimate the proportion of purple flowers to be approximately .

### Practice 9: Ratio

- 1 Complete the following ratio word problems. Show your working out.
- (a) Each sports track suit requires 160 m of fabric. How much fabric is required for the school's team of 8?

- (b) Tyn's chocolate cake recipe uses 30 g of cocoa. She needs to make 3 cakes and she has 100 g of cocoa left. Will she have enough?

- (c) To make his favourite shade of orange, Samir mixes 5 parts yellow to 2 parts red. He has 6 tins of red paint. How many tins of yellow paint does Samir need if he is to use all of the red paint?

- (d) Padma and Toby run for the same duration every day. Padma always runs 4 km in the time and Toby always runs 3 km. The time they had to run was reduced today, and Padma could only run 2 km. What distance could Toby run in the same time?

### Practice 2: Subtraction of more than 2 numbers

- 1 Count the number of counting blocks below. If Tya takes 8 blocks and Samir takes 23 blocks, how many are left?

$$\text{Blocks left} = \square - \square - \square$$

$$= \square - \square$$

$$= \square$$

So, there are  counting blocks left.



- 2 There are some counting blocks on a table. Toby takes 17 blocks. Another 15 blocks fall off the table. How many blocks are left?

$$\text{Blocks left} = \square - \square - \square$$

$$= \square - \square$$

$$= \square$$

So, there are  counting blocks left.



- 3 Padma and Samir have some counting blocks in a basket. Padma takes out 13 blocks and Samir takes out 24 blocks. How many blocks are left in the basket?

$$\text{Blocks left} = \square - \square - \square$$

$$= \square - \square$$

$$= \square$$

So, there are  blocks left.



- 4 A shop in the school canteen makes 36 plates of chicken curry and rice. It sells 13 plates at lunch time and 15 plates after school. How many plates are left?

$$\text{Plates left} = \square - \square - \square$$

$$= \square - \square$$

$$= \square$$

So, there are  plates left.



- 5 A school bus collects 78 learners from school. At the first stop, 26 learners get off. At the second stop, 12 learners get off. How many learners are on the bus now?

$$\text{Learners left} = \square - \square - \square$$

$$= \square - \square$$

$$= \square$$

So, there are  learners left on the bus.



- 6 A bakery has 51 cupcakes on a tray. On Monday it sells 24 cupcakes. How many cupcakes are left?

$$\text{Cupcakes left} = \square - \square$$

$$= \square$$

So, there are  cupcakes left.

### Practice 2: Word problems

- 1 Four legs are needed to make a table. A furniture maker orders 636 such legs. How many tables can be made from these legs?

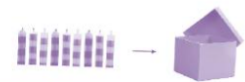


- (a) Make a model of the problem.

- (b) Solve the problem.

- (c) Relate the answer to the problem.

- 2 A factory produces 792 candles per day. The candles are packed into boxes so that each box contains 9 candles. How many such boxes can be packed with the candles produced in 1 day?



- (a) Make a model of the problem.

- (b) Solve the problem.

- (c) Relate the answer to the problem.

### Problem Solving

- 1 Look at the blocks and their heights. Find the total height of the stacks of blocks. Show your working.



(a)




(b)




## Self-guided problem solving

Problem-solving activities are embedded within practises for learners to combine knowledge of mathematics content and problem-solving skills.



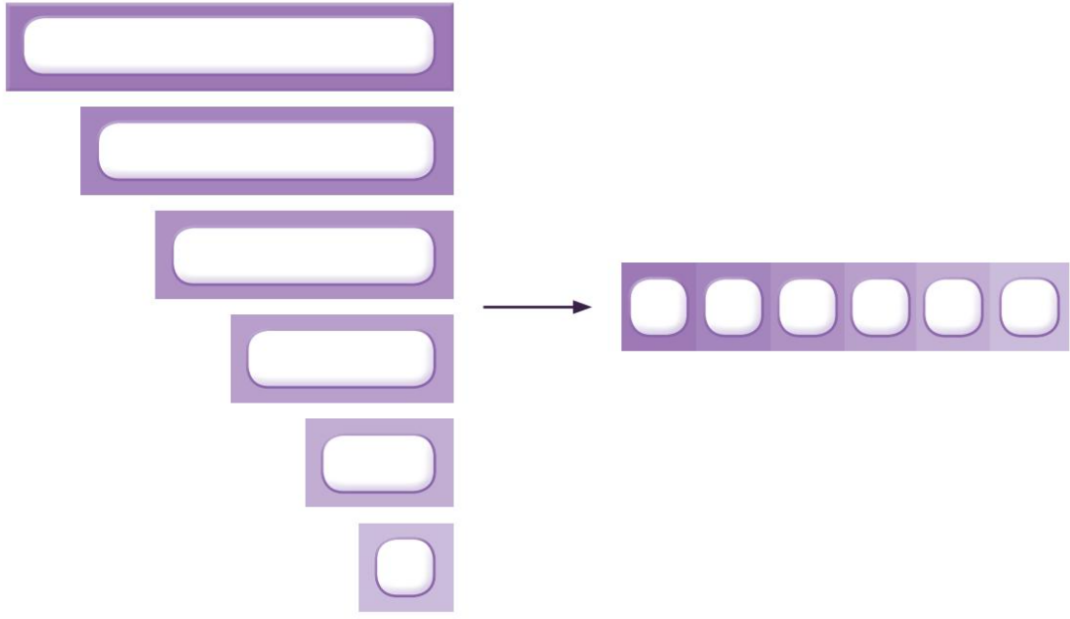
# Numbers up to 1 000 000

## Practice 1: Numbers up to 1 000 000

1 Complete the following.

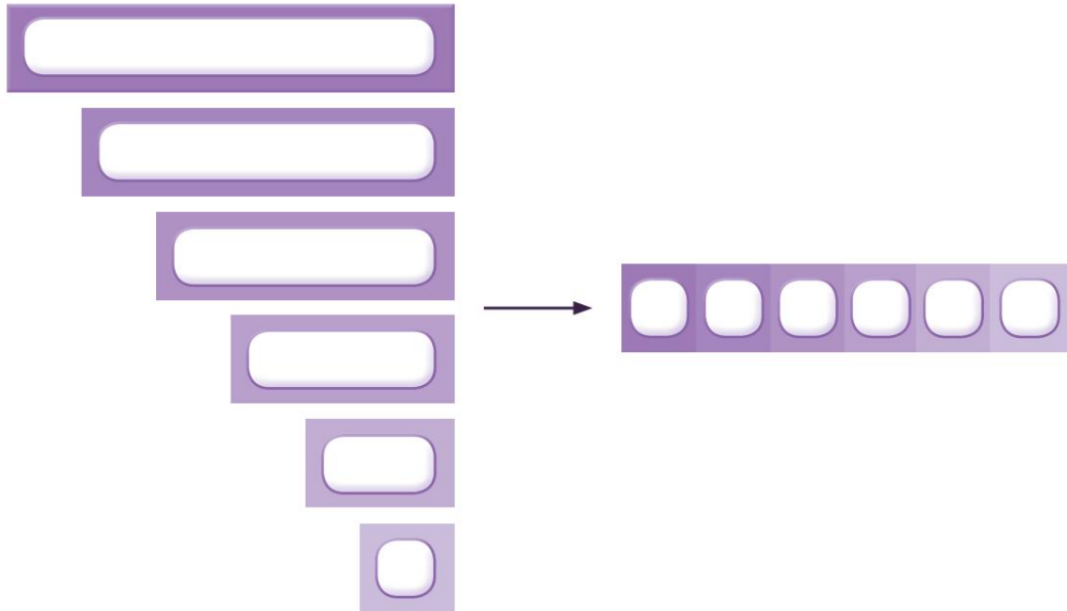
(a)

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	2	1	7	7	4	3



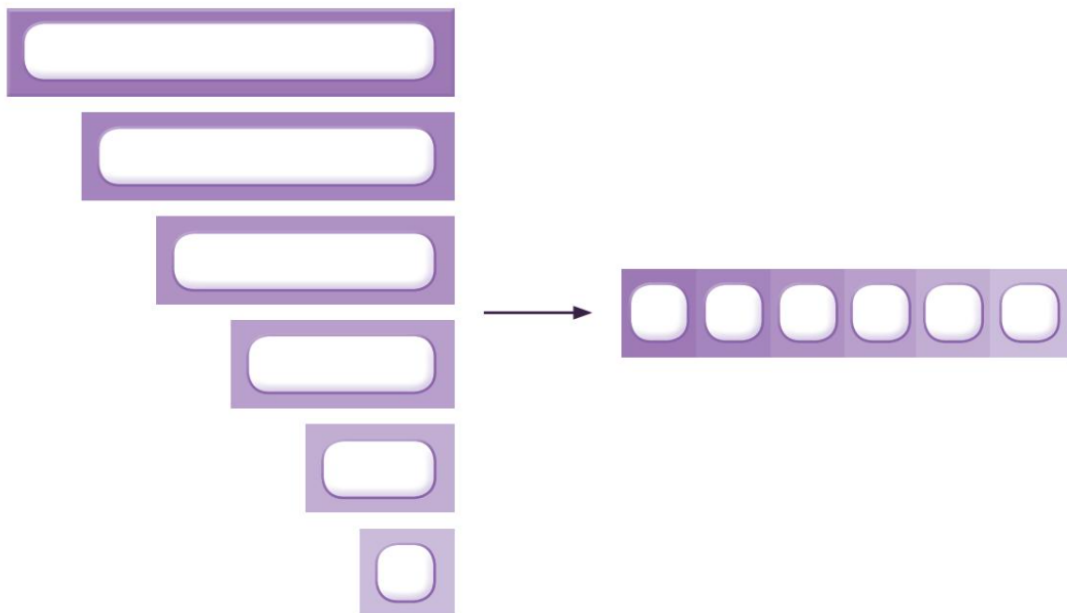
(b)

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	9	4	5	1	6	3



(c)

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	4	0	6	7	1	4



2 Write the number as numerals and words.

(a)

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	7	3	4	5	3	0

Numerals:

Words:

(b)

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	7	5	1	7	1	4

Numerals:

Words:

(c)

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	2	8	2	4	1	6

Numerals:

Words:

(d)

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	7	5	1	7	1	4

Numerals:

Words:

(e)

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	5	2	0	1	0	1

Numerals:

Words:

(f)

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	8	2	5	0	1	3

Numerals:

Words:

(g)

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
1	5	2	0	7	3	8

Numerals:

Words:

(h)

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
6	0	2	4	8	0	9

Numerals:

Words:

3 Write the numbers represented by the tables.

(a) 43 187

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

(b) 21 304

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

(c) 70 948

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

(d) 38 363

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

(e) 76 109

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

(f) 91 073

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

(g) 836018

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

(h) 672901

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

(i) 900253

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

(j) 835224

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

(k) 402738

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

(l) 299125

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

## Practice 2: Comparing and ordering numbers within 1 000 000

- 1 Look at the numbers in each table and complete the following.

**Table A**

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
2	3	1	7	4	2

**Table B**

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
2	5	2	3	6	0

- (a) What number does Table A represent?
- (b) What number does Table B represent?
- (c) Which table has more hundred thousands?  
 Table A       Table B       They are the same
- (d) Which table has more ten thousands?  
 Table A       Table B
- (e) Which table is greater?  
 Table A       Table B       They are the same

2 Look at the numbers in the place-value chart and complete the following.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
6	7	7	0	1	9
8	7	4	5	5	2
3	0	9	1	8	6

(a) Which number has the greatest number of hundred thousands?

(b) Which number has the smallest number of hundred thousands?

(c) Arrange the numbers from smallest to greatest.

Write the correct  $<$  or  $>$  symbol.

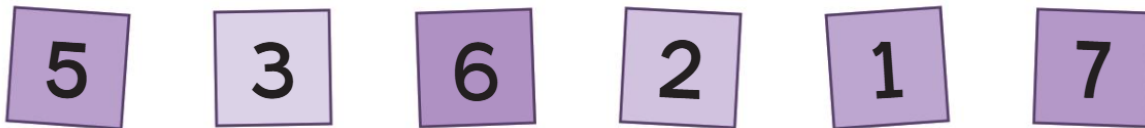
  

(d) Arrange the numbers from greatest to smallest.

Write the correct  $<$  or  $>$  symbol.

3 Complete the following.

(a) Use the numbers below to make three 6-digit numbers.



Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

(b) Arrange the numbers from smallest to greatest.

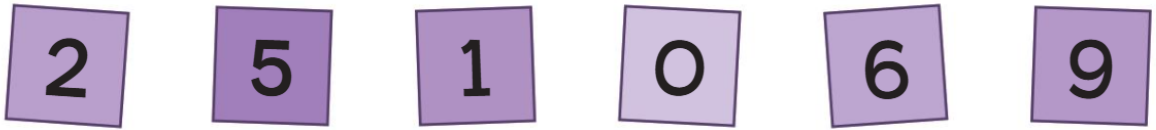
Write the correct  $<$  or  $>$  symbol.

(c) Arrange the numbers from greatest to smallest.

Write the correct  $<$  or  $>$  symbol.

4 Complete the following.

(a) Use the numbers below to make four 6-digit numbers.



Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

(b) Arrange the numbers from smallest to greatest.

Write the correct  $<$  or  $>$  symbol.

(c) Arrange the numbers from greatest to smallest.

Write the correct  $<$  or  $>$  symbol.

- 5 Arrange the numbers from the greatest to the smallest. Then arrange them from the smallest to the greatest. Write the correct  $<$  or  $>$  symbol.

(a)

25 656

618 010

161 009

99 512

$\square$    $\square$    $\square$

greatest

smallest

$\square$    $\square$    $\square$

smallest

greatest

(b)

37 310

272 314

116 189

314 156

$\square$    $\square$    $\square$

greatest

smallest

$\square$    $\square$    $\square$

smallest

greatest

(c)

464 276

467 220

470 033

54 920

\_\_\_\_\_ □ \_\_\_\_\_ □ \_\_\_\_\_ □ \_\_\_\_\_

greatest

smallest

\_\_\_\_\_ □ \_\_\_\_\_ □ \_\_\_\_\_ □ \_\_\_\_\_

smallest

greatest

(d)

118 462

120 314

118 154

118 291

\_\_\_\_\_ □ \_\_\_\_\_ □ \_\_\_\_\_ □ \_\_\_\_\_

greatest

smallest

\_\_\_\_\_ □ \_\_\_\_\_ □ \_\_\_\_\_ □ \_\_\_\_\_

smallest

greatest

## Problem Solving

Samir and Tya are given a set of numbers each. Find out who has the greatest number. Write the correct  $<$  or  $>$  symbol.

Samir's set	Tya's set
876 340	834 904
367 966	879 232
336 521	685 399

(a) Arrange Samir's numbers from the greatest to the smallest.

greatest smallest

(b) Arrange Tya's numbers from the greatest to the smallest.

greatest smallest

(c) Compare the greatest numbers from each set.

	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
Samir						
Tya						

So,  has the greatest number.

