

MULTI
MATHS

The title 'MULTI MATHS' is rendered in large, 3D, yellow and orange letters with blue outlines. Several cartoon children are interacting with the letters: a boy sits on the 'M', a girl stands on the 'S', and others are positioned around the letters holding books, a pen, and a ruler.

Textbook

4



Sangeeta Kaur Dhillon

Preface




Ultimaths - Textbook 4

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RUKAN Sentra Niaga Puri Indah Block T1-14

West Jakarta 11610

 : 0856 9785 6420

 : @astailmusukses

 : contact@astailmu.com

 : www.astailmu.id

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ULTI MATHS is a mathematics learning series for primary school students. The contents are systematically arranged according to the ability of the child, which can be applied in everyday life, and can be used as preparation for the next level.



ULTI MATHS uses an international standard of mathematical teaching and learning approaches, which have been proven to bring children success in learning mathematics. The Concrete-Pictorial-Abstract approach introduces new concepts with the use of appropriate manipulatives, before moving to pictorials and abstract representations. The development of topics across the levels in spiral progression approach helps learners acquire a new concept by building on previously learned concepts. The focus on Problem Solving by promoting the use of bar models, empowers students to develop visualization skills to better understand word problems before solving them.



ULTI MATHS provides active, fun, and collaborative mathematics learning with lots of activities and games. These learning experiences will enable students to acquire and apply concepts and skills, develop critical thinking skills, and positive attitudes towards mathematics.

Using This Book

Ultimaths has some special features to help students learn and use this book.



Let's Find Out

To check students' prior knowledge.



Unit 7 Percentage
Lesson 1 Per Cent

Let's Find Out

Draw a square. Divide the length into 10 equal parts. Now divide the breadth into 10 equal parts. Count the number of squares you have. Colour 8 of them green. What can you conclude about the entire figure? How many ways can you express this information? Discuss with your partner. Write out your possibilities.

Let's Learn

The square grid has 100 equal parts. 16 equal parts are purple. 16 out of 100 equal parts are purple.

$$\frac{16}{100} \text{ or } 0.16$$

We can also express it as 16% sixteen per cent.

16 out of 100 = $\frac{16}{100}$

$\frac{16}{100}$ is 16 per cent.

$\frac{16}{100}$ is 16%.

16% of the whole is coloured.

The symbol for per cent is %.

The whole is 100%.



Let's Learn

To introduce concepts, skills, or problem-solving strategies in an engaging way by using Concrete-Pictorial-Abstract approach.

Unit 7 Percentage
Lesson 1 Per Cent

Let's Find Out

Draw a square. Divide the length into 10 equal parts. Now divide the breadth into 10 equal parts. Count the number of squares you have. Colour 8 of them green. What can you conclude about the entire figure? How many ways can you express this information? Discuss with your partner. Write out your possibilities.

Let's Learn

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16% of the whole is coloured.

The symbol for per cent is %.

The whole is 100%.



Let's Practise

To practise the concepts learned in Let's Learn section.

Let's Practise

Fill in the boxes.

1. There are equal parts. out of parts are yellow. Fraction . Decimal . Percentage .

2. There are equal parts. out of parts are shaded. Fraction . Decimal . Percentage .

3. What percentage of the whole is shaded? . What percentage of the whole is not shaded? .

4. What percentage of the whole is red? . What percentage of the whole is not shaded? .

Something More Exciting



More challenging practice to stimulate higher order thinking.

Something More Exciting

Sally: I spent 30% of my money on shopping.

Tina: I spent 30% of my money on shopping.

So, both of you spent the same amount of money.

Rahul: Is Rahul correct? If yes, use an example to prove your answer. If no, use an example to prove your answer.







Let's Play



Provide fun games to encourage collaboration and to deepen or extend understanding of concepts through the games.



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Lesson 1 Counting To 100 000








Let's Find Out







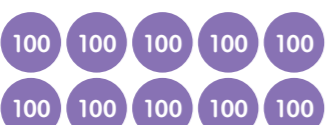





There are 64 528 trees in Pekanbaru.

Can you show 64 528 using counters , , ,  and ?




Let's Learn

- 1 We can show 1 one, 1 ten, 1 hundred, 1 thousand and 1 ten thousand using , , ,  and  as follows.

 10 ones	 =	 1 ten
 10 tens	 =	 1 hundred
 10 hundreds	 =	 1 thousand
 10 thousands	 =	 1 ten thousand

- 2 Read the numbers. What comes next?

1000, 2000, 3000, 4000, 5000, 6000, 7000, 8000, 9000, 
















































We are counting on in thousands.

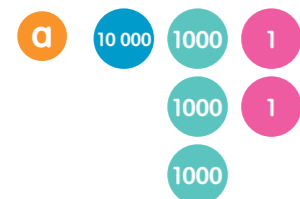
1 thousand after 9 thousands is 10 thousands.



- 3 Let's count in ten thousands.

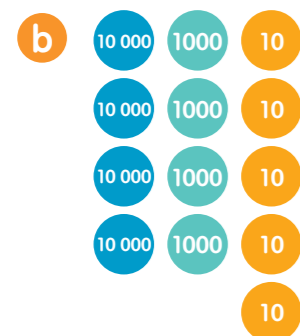
We Count	We Write	We Spell
	10 000	Ten thousand
 	20 000	Twenty thousand
  	30 000	Thirty thousand
   	40 000	Forty thousand
    	50 000	Fifty thousand
     	60 000	Sixty thousand
     	70 000	Seventy thousand
     	80 000	Eighty thousand
     	90 000	Ninety thousand
     	100 000	One hundred thousand

4 Let's count in ten thousands, thousands, hundreds, tens and ones.



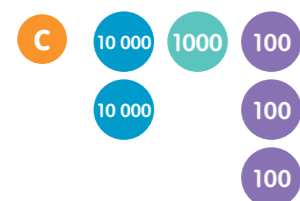
10 000, ...
11 000, ... 12 000, ... 13 000,
13 001, **13 002**

13 002
Thirteen thousand and two



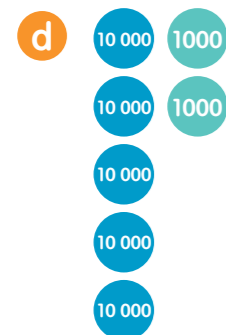
10 000, ... 20 000, ... 30 000, ... 40 000,
41 000, ... 42 000, ... 43 000, ... 44 000, ...
44 010, ... 44 020, ... 44 030, ... 44 040, ... **44 050**

44 050
Forty-four thousand and fifty



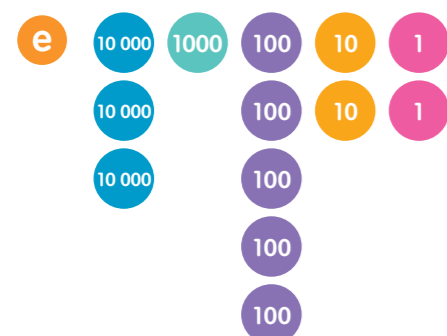
10 000, ... 20 000,
21 000, ...
21 100, ... 21 200, ... **21 300**

21 300
Twenty-one thousand and three hundred



10 000, ... 20 000, ... 30 000, ... 40 000, ...
50 000, ...
51 000, ... **52 000**

52 000
Fifty-two thousand



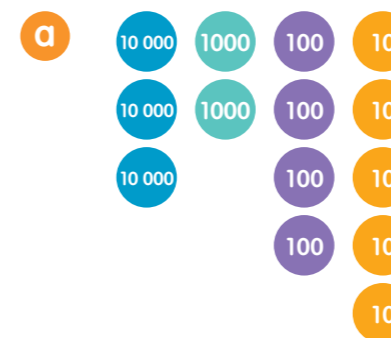
10 000, ... 20 000, ... 30 000,
31 000, ...
31 100, ... 31 200, ... 31 300, ... 31 400, ... 31 500,
31 510, ... 31 520,
31 521, 31 522, **31 523**

31 523
Thirty-one thousand, five hundred and
twenty-three

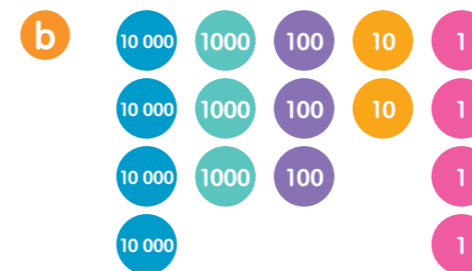


Let's Practise

1 Count in ten thousands, thousands, hundreds, tens and ones.

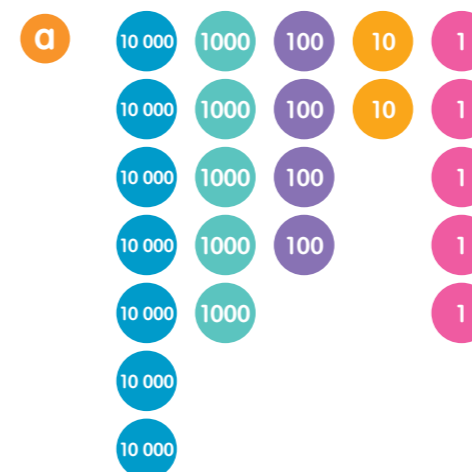


10 000, ... , ... , ...
31 000, ... , ...
32 100, ... , ... , ... , ...
32 410, ... , ... , ... , ...
, ...
32 451,



10 000, ... , ... , ... , ...
41 000, ... , ... , ...
43 100, ... , ... , ...
43 410, ... , ...
43 421, , ,

2 Count and write each number in numerals.



3 Write each number in words.

a 96 728

b 15 001

c 27 550

d 82 403

e 58 024

f 70 346

4 Write each number in numerals.

a Fifteen thousand and twenty

b Twenty-four thousand, six hundred and thirty

c Fifty thousand and eight hundred

d Forty-six thousand and thirteen



Workbook: Exercise 1, Page 2 to 3

Lesson 2 Place Value



Let's Find Out

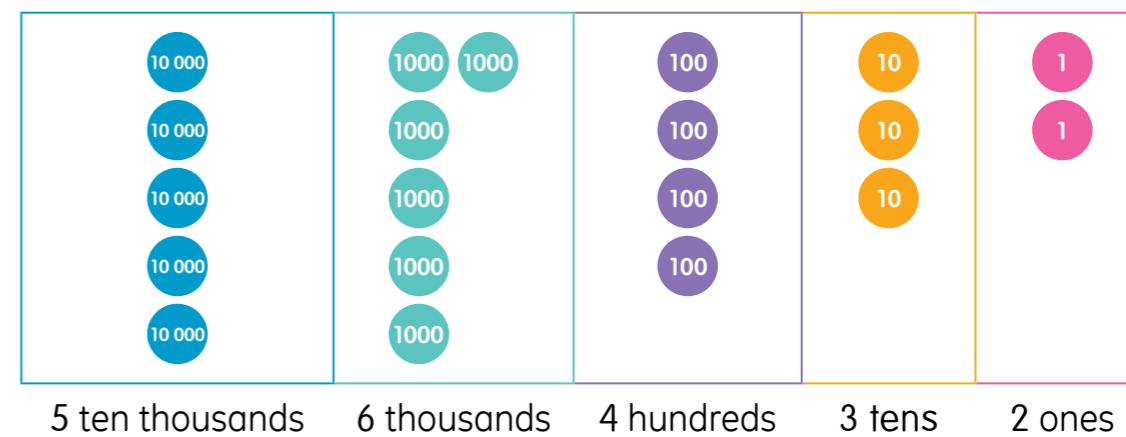
Can you use this place value table to show the number 56 432?

Ten thousands	Thousands	Hundreds	Tens	Ones



Let's Learn

1 Let's look at the number 56 432 in different ways.



Ten thousands	Thousands	Hundreds	Tens	Ones
5	6	4	3	2

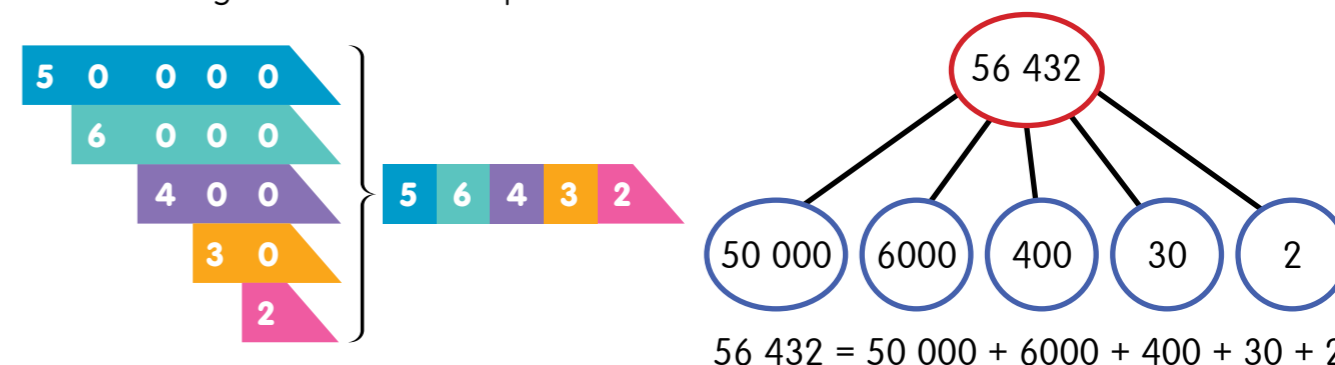
The digit 5 is in the ten thousands place and has a value of 50 000.

The digit 6 is in the thousands place and has a value of 6000.

The digit 4 is in the hundreds place and stands for 4 hundreds or 400.

The digit 3 is in the tens place and stands for 3 tens or 30.

The digit 2 is in the ones place and stands for 2 ones or 2.



$$56\ 432 = 50\ 000 + 6\ 000 + 400 + 30 + 2$$

2 Let's read and write numbers to 100 000.

Place-Value Model

a

Place	Ten thousands	Thousands	Hundreds	Tens	Ones
Digit	2	6	0	0	3
Value	20 000	6000	0	0	3

$$26\ 003 = 20\ 000 + 6000 + 3$$

In words: Twenty-six thousand and three

b

Place	Ten thousands	Thousands	Hundreds	Tens	Ones
Digit	8	0	5	3	6
Value	80 000	0	500	30	6

$$80\ 536 = 80\ 000 + 500 + 30 + 6$$

In words: Eighty thousand, five hundred and thirty-six



Let's Practise

1 Fill in the boxes with the correct numbers.

a

Place	Ten thousands	Thousands	Hundreds	Tens	Ones
Digit	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Value	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

The digit is in the ten thousands place.

The digit is in the thousands place.

The digit is in the hundreds place.

The digit is in the tens place.

The digit is in the ones place.

The digit 4 stands for 4 or .

The digit 5 stands for 5 or .

The digit 1 stands for 1 or .

The digit 7 stands for 7 or .

b

Ten thousands	Thousands	Hundreds	Tens	Ones

The digit is in the ten thousands place and stands for .

The digit 5 is in the place and stands for .

The digit is in the hundreds place and has a value of .

The digit 0 is in the place and has a value of .

The digit is in the ones place and has a value of .

2 Let's look at the number 32 055.

a Fill in the missing parts.

Ten thousands	Thousands	Hundreds	Tens	Ones
<input type="text"/>	<input type="text"/>	<input type="text"/>	5	<input type="text"/>

b The digit is in the thousands place.

c The digit 3 has a value of .

d $32\ 055 = \text{} + \text{} + 50 + \text{$



Lesson 3

Comparing Numbers Within 100 000



Let's Find Out

Show the numbers 80 325 and 38 520 using , , , and .
Which number is greater?
Explain your answer.



Let's Learn

3.1 Comparing ten thousands

Which is greater — 80 325 or 38 520?

80 325	
38 520	

Ten thousands	Thousands	Hundreds	Tens	Ones
8	0	3	2	5
3	8	5	2	0



Compare the ten thousands.
8 ten thousands is greater than 3 ten thousands.

So, 80 325 is greater than 38 520.
We write $80\ 325 > 38\ 520$.

3.2 Comparing ten thousands (using place-value model)

Which is smaller – 75 368 or 78 124?

	Ten thousands	Thousands	Hundreds	Tens	Ones
75 368	7	5	3	6	8
78 124	7	8	1	2	4



Compare the ten thousands.
They are the same.

Let's compare the thousands, then.
5 thousands is smaller than 8 thousands.



So, 75 368 is smaller than 78 124.

We write $75\ 368 < 78\ 124$.



Which is greater – 43 615 or 43 716?
How do you compare them?

3.3 Comparing 3 numbers

Let's use the digits **1** **2** **4** **6** **0** to form three 5-digit numbers.

Arrange these numbers in order, beginning with the greatest.

62 410, 62 041, 62 140

The ten thousands are the same. The thousands are also the same. Let's compare the hundreds, then!



We can use the following place value table to compare.

Ten thousands	Thousands	Hundreds	Tens	Ones
6	2	4	1	0
6	2	0	4	1
6	2	1	4	0

4 hundreds is the greatest.

So, 62 410 is greatest.

0 hundreds is the smallest.

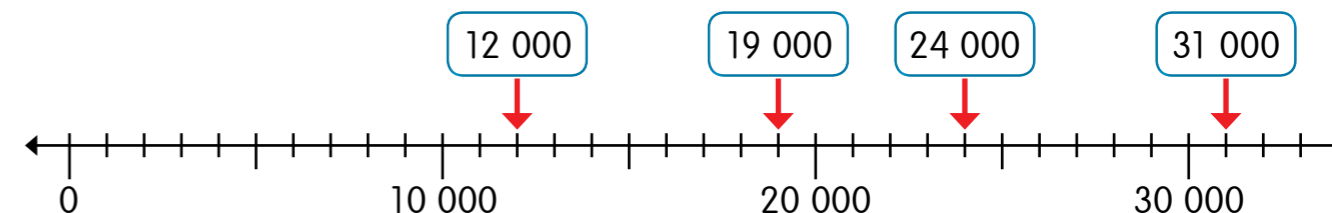
So, 62 041 is smallest.

The numbers, arranged in order beginning with the greatest, are as follows:

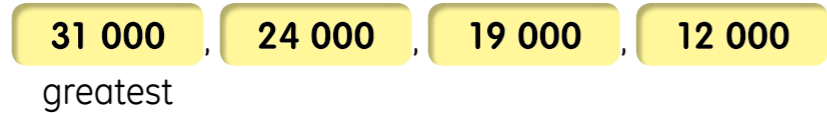
62 410 62 140 62 041
Greatest Smallest

3.4 Ordering using number line

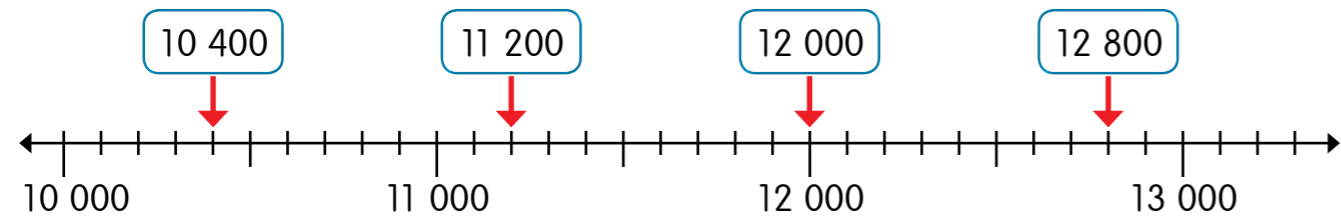
This is a number line representing thousands.



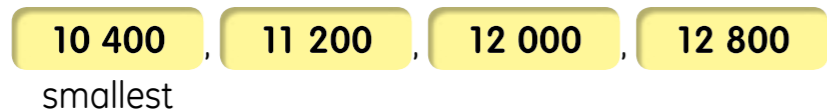
Arrange the numbers from the greatest to the smallest.



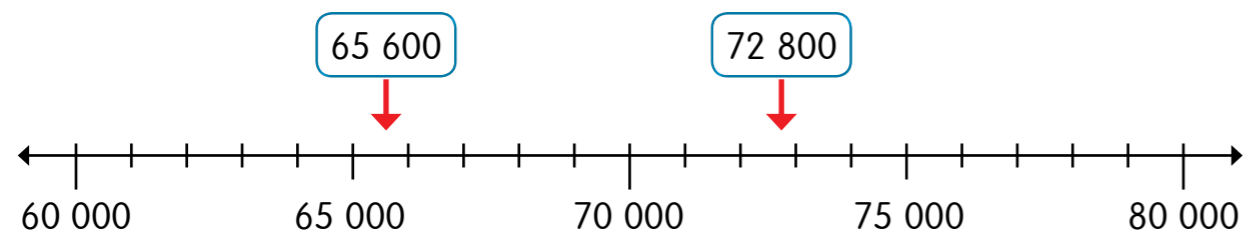
This is a number line representing hundreds.



Arrange the numbers from the smallest to the greatest.



a Which is smaller — 65 600 or 72 800?

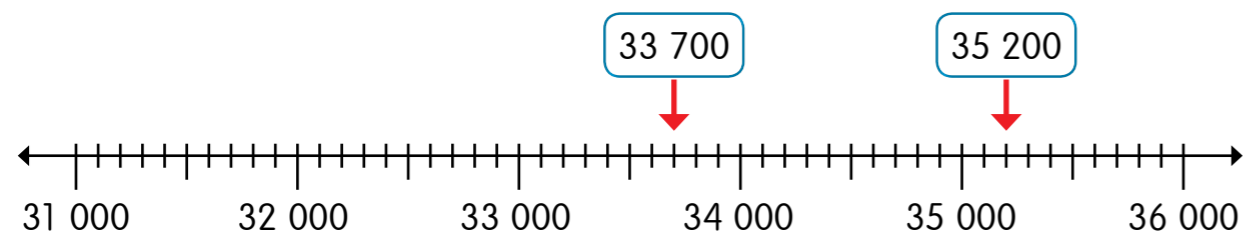


65 600 comes before 72 800 on the number line.

So, 65 600 is smaller than 72 800.

We write $65\,600 < 72\,800$.

b Which is greater — 33 700 or 35 200?

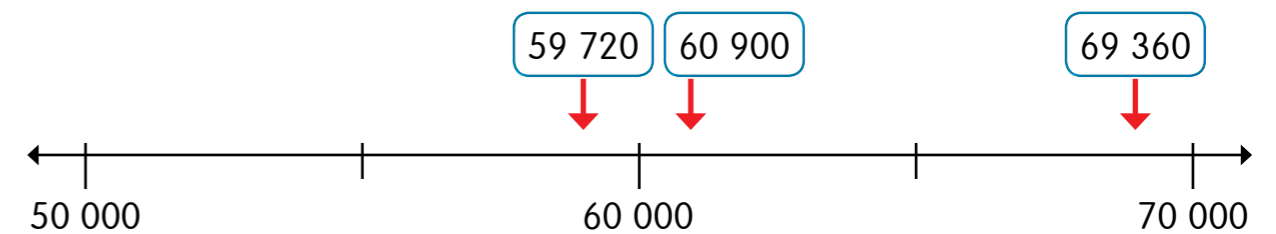


35 200 comes after 33 700 on the number line.

So, 35 200 is greater than 33 700.

We write $35\,200 > 33\,700$.

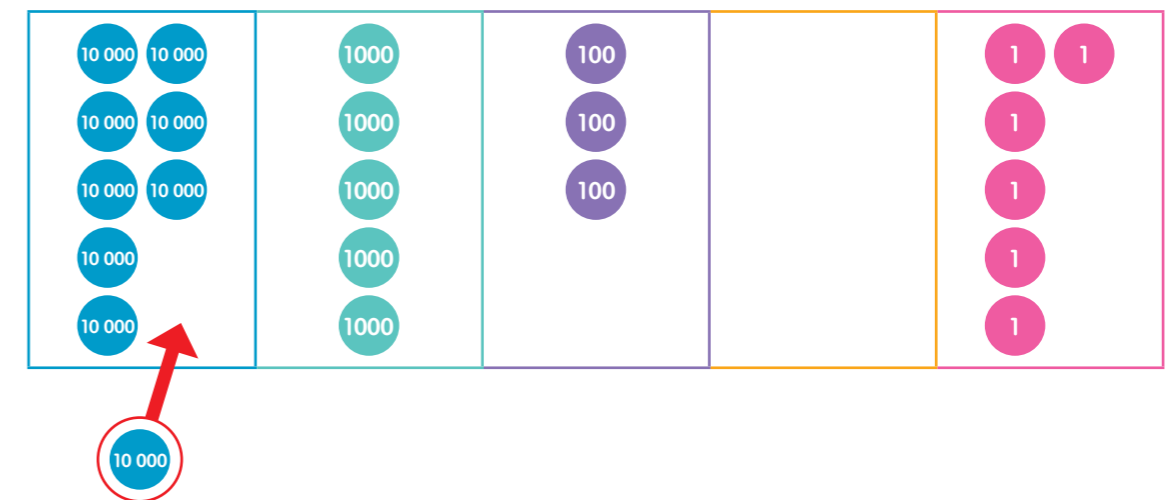
c Arrange 59 720, 69 360 and 60 900 in order, beginning with the greatest.



So, the numbers arranged from greatest to smallest are 69 360, 60 900 and 59 720.

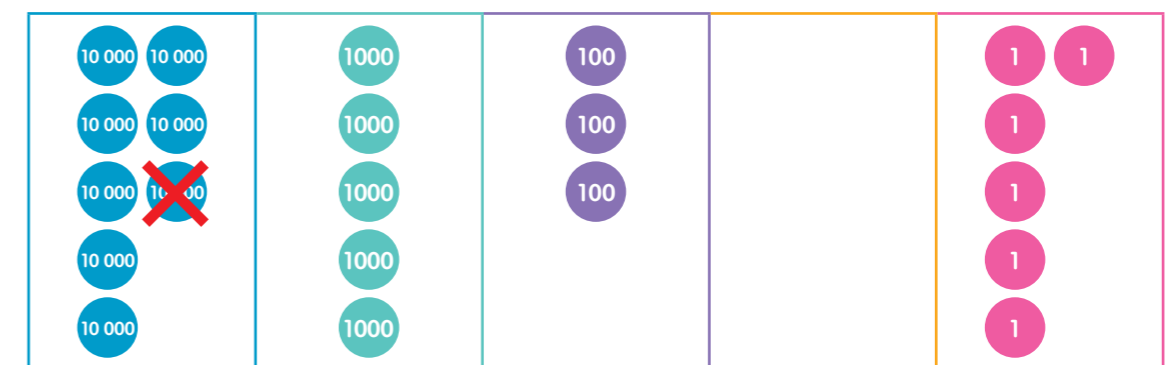
3.5 Comparing more or less

- 1 Look at the number 85 306.
What is 10 000 more than 85 306?
What is 10 000 less than 85 306?



10 000 more than 85 306 is 95 306.

$$85\,306 + 10\,000 = 95\,306$$



10 000 less than 85 306 is 75 306.

$$85\,306 - 10\,000 = 75\,306$$

2 Look at the numbers 43 968 and 53 968.

Ten thousands	Thousands	Hundreds	Tens	Ones
4	3	9	6	8
5	3	9	6	8

43 968 is **10 000** less than 53 968.

10 000 more than 43 968 is **53 968**

43 968 is 10 000 less than 53 968.

53 968 is **10 000** more than 43 968.

3.6 Number pattern

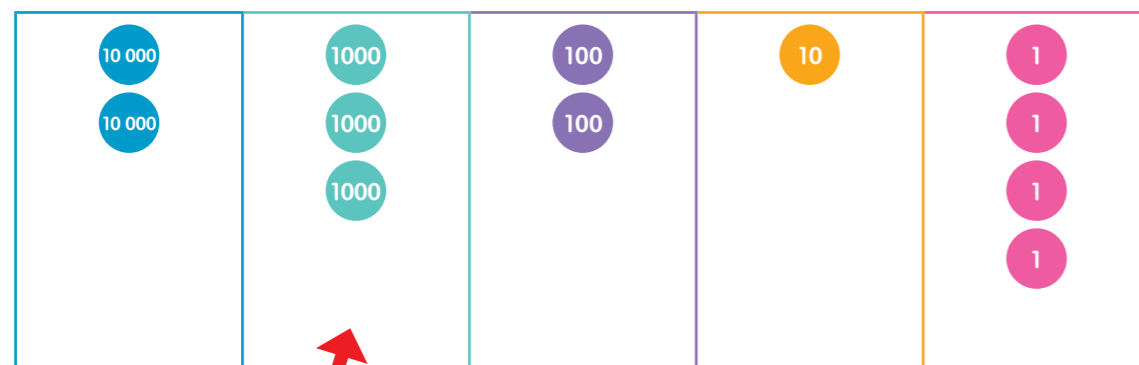
Complete the number pattern below.

21 214	22 214	23 214	?	25 214	26 214	27 214
--------	--------	--------	---	--------	--------	--------

1 21 214 22 214 23 214 ? 25 214 26 214 27 214

1000 more 1000 more 1000 more

What is 1000 more than 23 214?

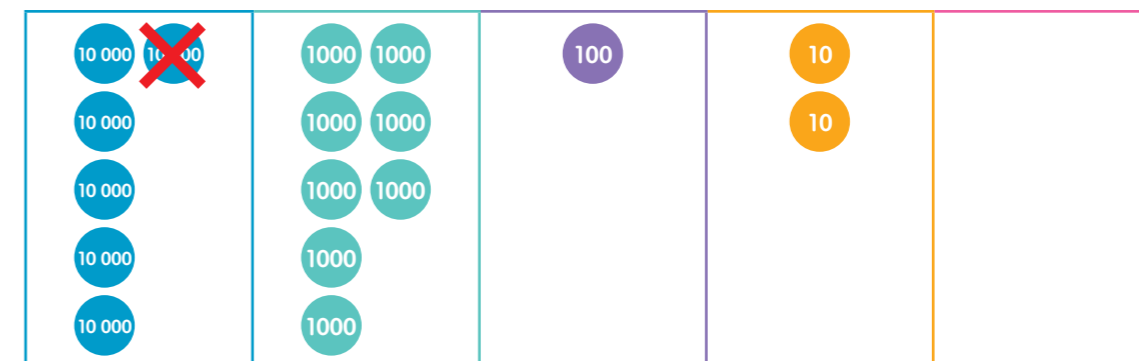


1000 more than **23** 214 is **24** 214.

2 98 120 88 120 78 120 68 120 ? 48 120 38 120

10 000 less 10 000 less 10 000 less 10 000 less

What is 10 000 less than 68 120?

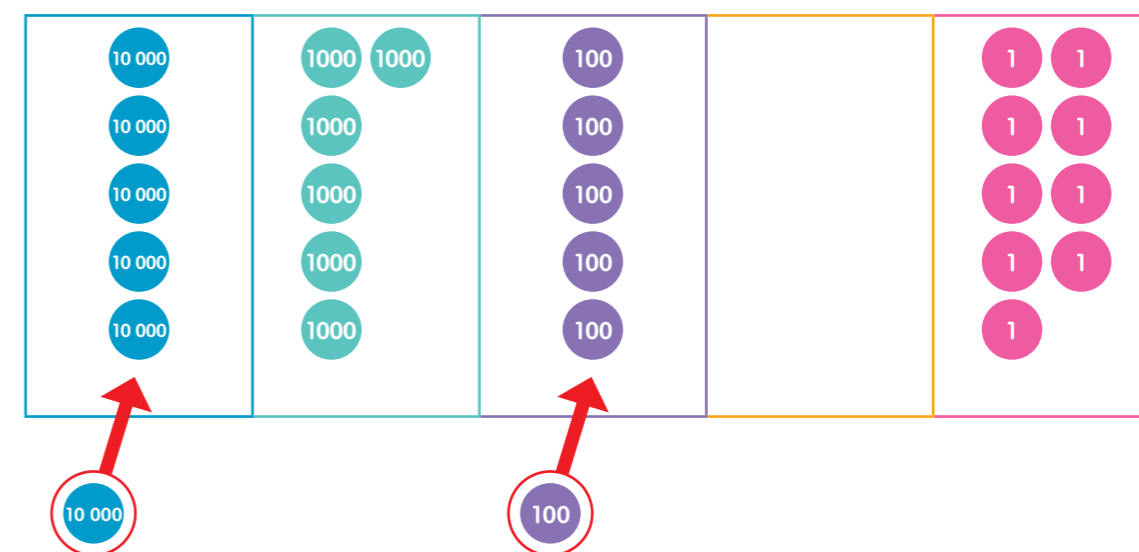


10 000 less than **68** 120 is **58** 120.

3 26 209 36 309 46 409 56 509 ? 76 709 86 809

+ 10 100 + 10 100 + 10 100 + 10 100

What is 10 100 more than 56 509?

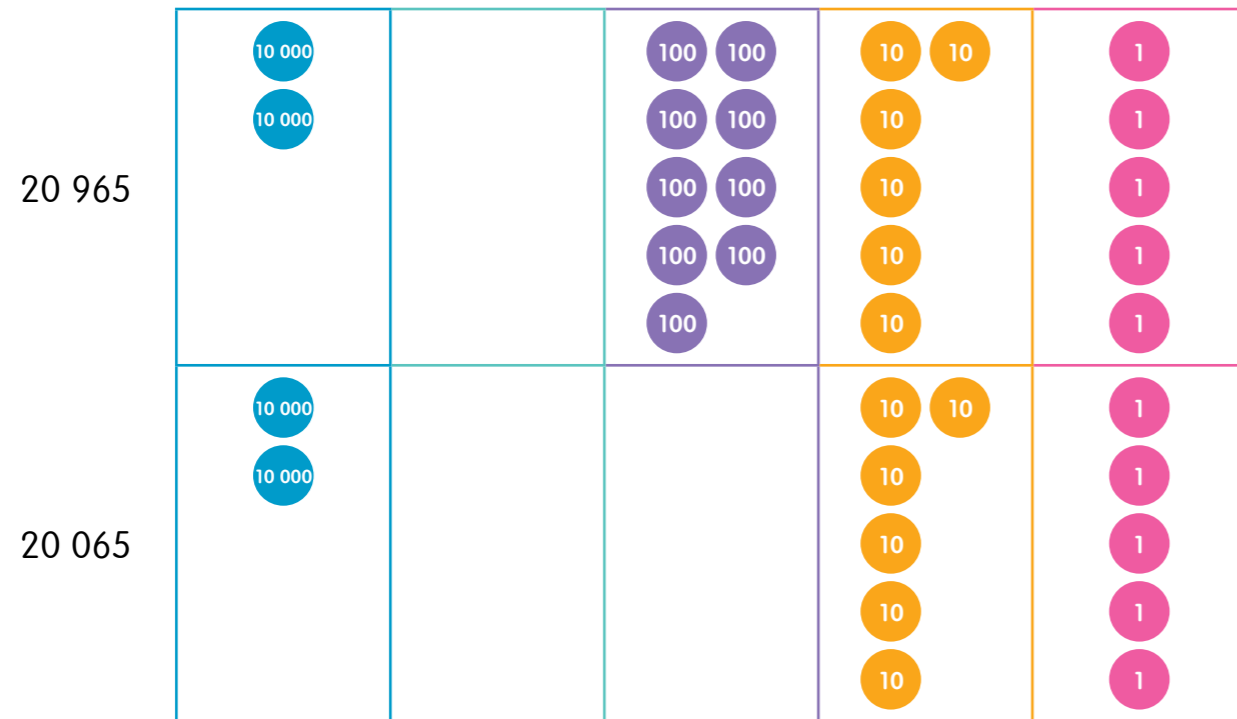


10 100 more than **56** 509 is **66** 509.

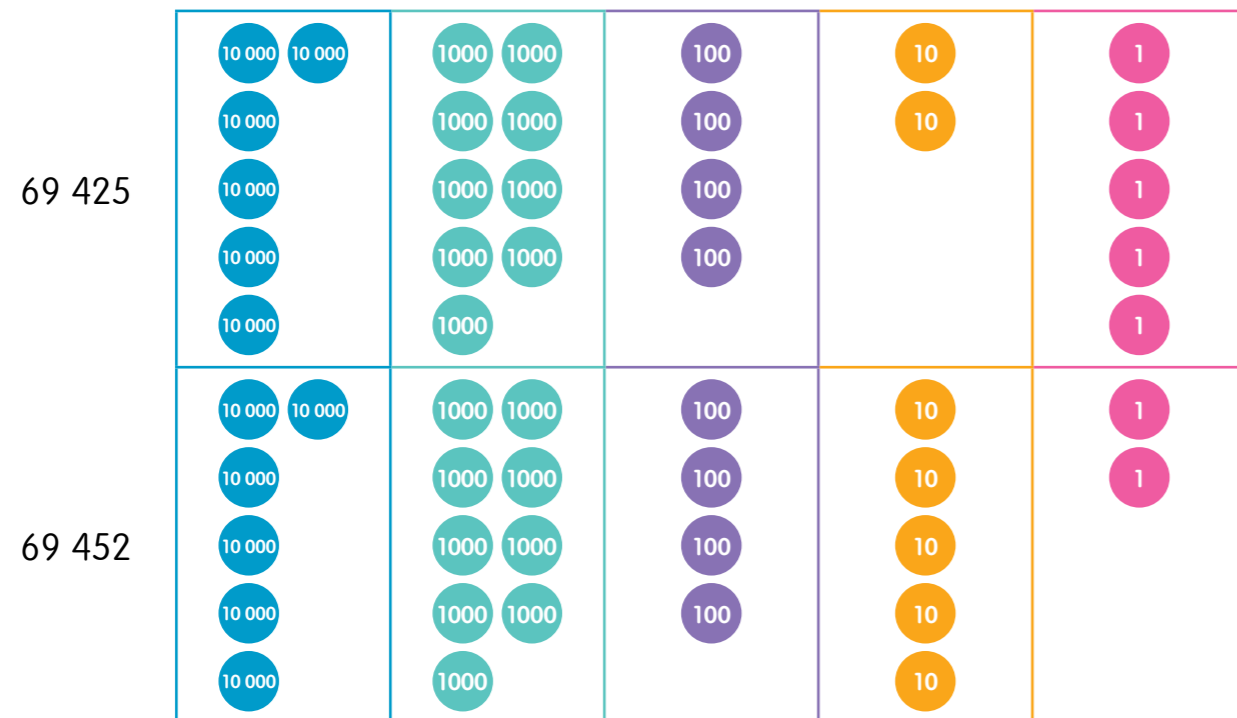


Let's Practise

1 Which is greater?



2 Which is smaller?



3 Use > or <.

- a 21 673 22 673
- b 79 520 89 520
- c 54 109 54 019

4 Which is greater?

	Ten thousands	Thousands	Hundreds	Tens	Ones
16 853	1	6	8	5	3
18 538	1	8	5	3	8

5 Which is smaller?

	Ten thousands	Thousands	Hundreds	Tens	Ones
43 009	4	3	0	0	9
33 009	3	3	0	0	9

6 Which is greater?

- a 19 047 or 21 055
- b 54 810 or 46 923
- c 33 709 or 30 907
- d 66 842 or 67 482

7 Which is smaller?

- a 23 005 or 32 500
- b 71 663 or 68 010
- c 59 802 or 57 464
- d 13 365 or 14 579

8 Compare the following numbers:

a Using the place-value model

46 132, 42 631, 43 126

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"/>

is the greatest.

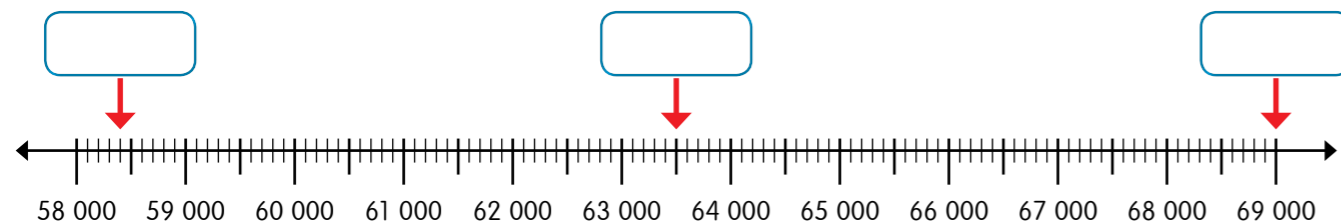
is the smallest.

Arranged in order, beginning with the greatest:

, , .

b Using the number line

63 500, 58 400, 69 000



is the smallest.

is the greatest.

Arranged in order, beginning with the smallest:

, , .

9 Fill in the missing numbers.

a 10 000 more than 28 123 is .

b 1000 less than 91 670 is .

c is 100 more than 6349.

d is 10 000 less than 26 500.

e 34 222 is more than 33 222.

f 80 541 is less than 80 641.

10 Complete the number patterns.

a 84 123, 74 123, 64 123, , , 34 123, 24 123

b 68 427, 69 427, , , 72 427, 73 427, 74 427

c 24 500, 24 400, 24 300, , , 24 000, 23 900

d 11 265, , 11 285, 11 295,

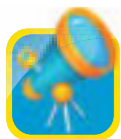
e 18 901, 28 901, 38 901, , , 68 901, 78 901

f 81 567, 80 567, 79 567, , , 76 567, 75 567



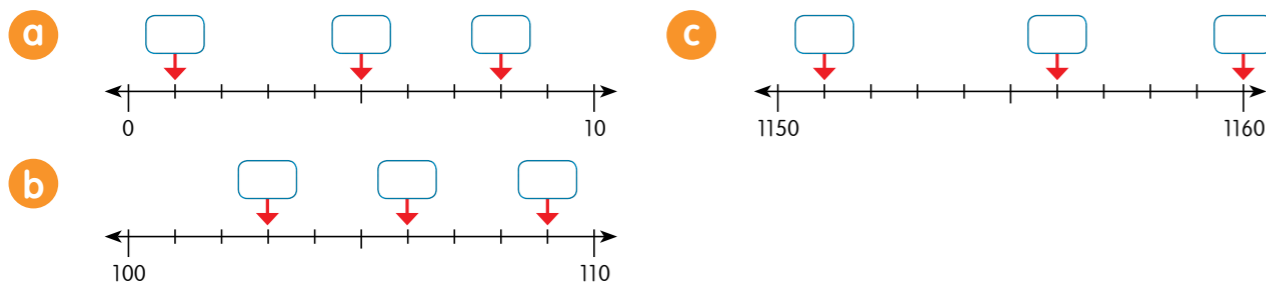
Workbook: Exercise 3, Page 7 to 13

Lesson 4 Rounding Numbers To The Nearest Ten



Let's Find Out

Look at the following number lines. Are you able to fill in the missing numbers?



Let's Learn

1 a The table shows the number of students in each class of Grade 4.

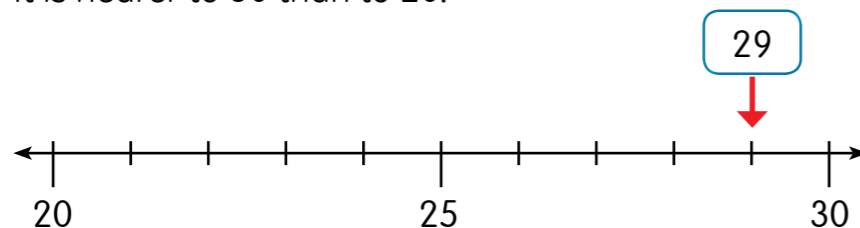
Grade 4	
4A	29
4B	32
4C	45

There about 30 students in 4A as well as in 4B.



There are about 50 students in 4C.

Let's place 29 on the number line.
It is nearer to 30 than to 20.



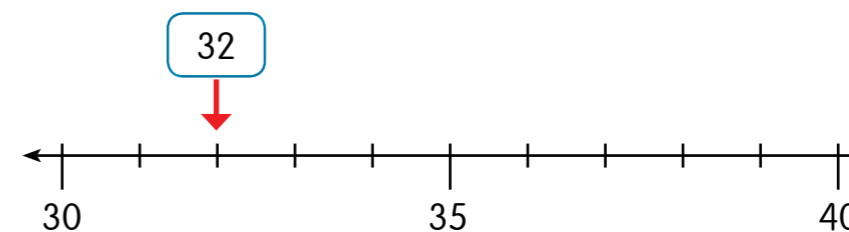
29 is 30 when rounded to the nearest ten.
29 is approximately equal to 30.

Write $29 \approx 30$

" \approx " stands for "approximately equal to".



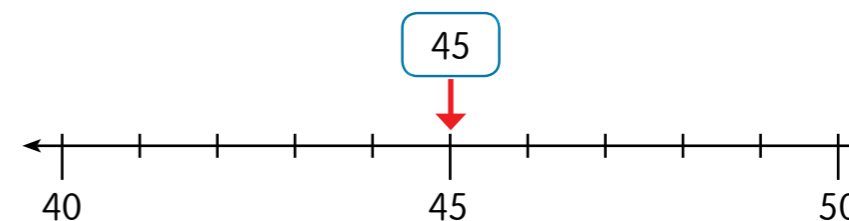
Let's place 32 on the number line.
It is nearer to 30 than to 40.



32 is 30 when rounded to the nearest ten.
32 is approximately equal to 30.

Write $32 \approx 30$

Let's place 45 on the number line.
It is halfway between 45 and 50.



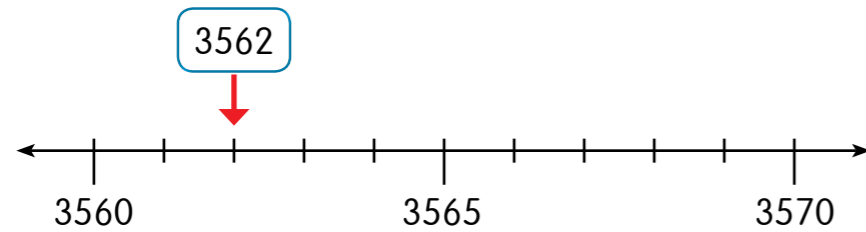
How do we decide if 45 is nearer to 40 or to 50?

In such a case, we take 50 to be the nearer 10.
45 is 50 when rounded to the nearest ten.
45 is approximately equal to 50.

Write $45 \approx 50$



b Round 3562 to the nearest ten.



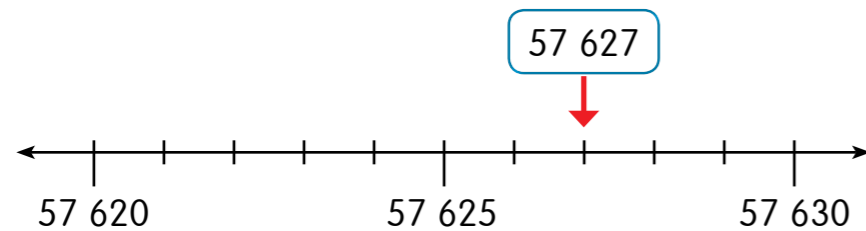
3562 is between 3560 and 3570.

It is nearer to 3560 than to 3570.

3562 is **3560** when rounded to the nearest ten.

Write **$3562 \approx 3560$**

c Round 57 627 to the nearest ten.



57 627 is between 57 620 and 57 630.

It is nearer to 57 630 than to 57 620.

57 627 is **57 630** when rounded to the nearest ten.

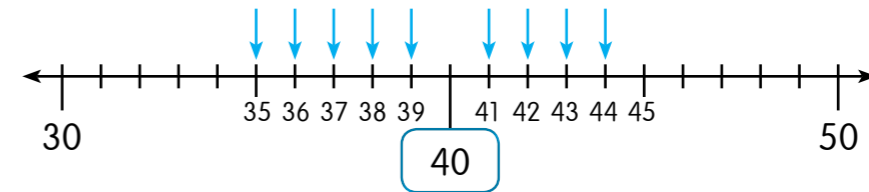
Write **$57\ 627 \approx 57\ 630$**

To round a number to the nearest ten, look at the digit in the ones place. If the digit is 5 or more, round up.



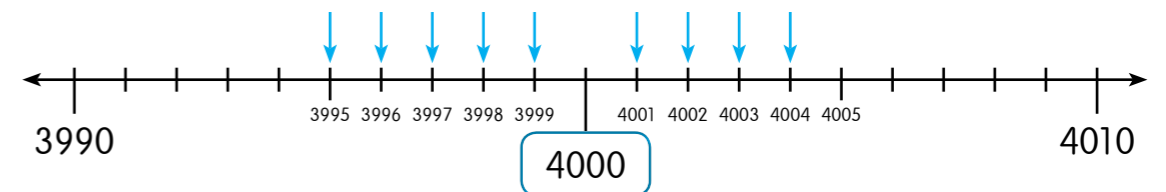
2 Let's figure out numbers that give the following answers when rounded to the nearest ten.

a 40



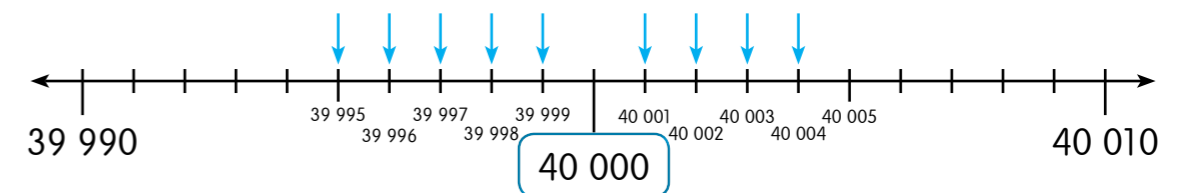
35, 36, 37, 38, 39 are possible numbers, as well as 41, 42, 43 and 44. They all give the answer **40** when rounded to the nearest ten.

b 4000



3995, 3996, 3997, 3998, 3999, 4001, 4002, 4003 and 4004 all give the answer **4000** when rounded to the nearest ten.

c 40 000



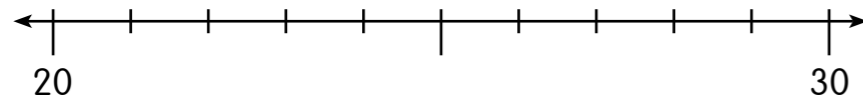
39 995, 39 996, 39 997, 39 998, 39 999, 40 001, 40 002, 40 003 and 40 004 all give the answer **40 000** when rounded to the nearest ten.



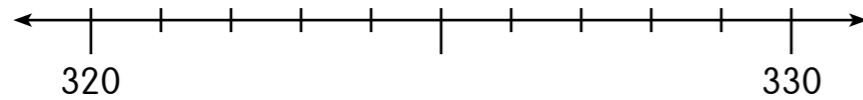
Let's Practise

1 Indicate each number on the number line with an arrow (↓).
Round the number to the nearest ten and circle the answer.

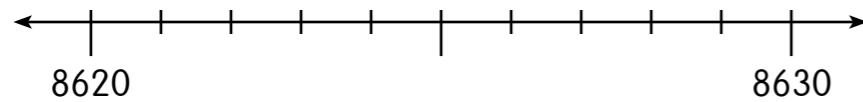
a 25



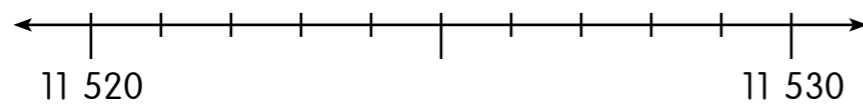
b 326



c 8623

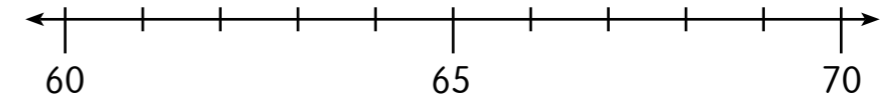


d 11 528



2 Study each number line and fill in the blanks.

a 69



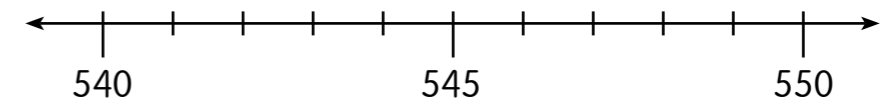
69 is between and .

It is nearer to than to .

69 is when rounded to the nearest ten.

69 ≈

b 545



545 is between and .

545 is when rounded to the nearest ten.

545 ≈

3 Round the following numbers to the nearest ten.

a $76 \approx$

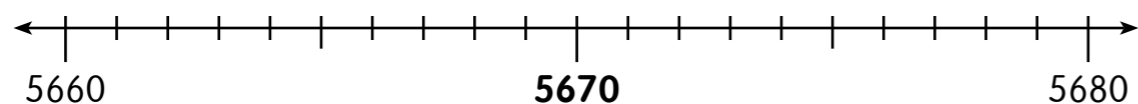
b $326 \approx$

c $4581 \approx$

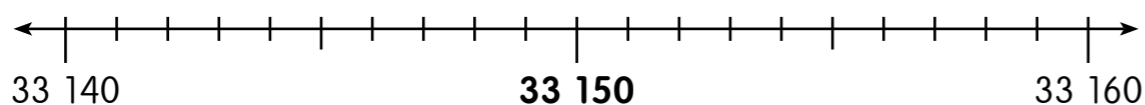
d $72\ 931 \approx$

4 Read and try to figure the riddles out.

a I round a number to the nearest ten and my answer is 5670. What can my number be? How many possible answers are there?



b My answer is 33 150 when I round a number to the nearest ten. What are the possible numbers?



5 a Based on your answer from 4a,

- suggest
- i the greatest possible number;
 - ii the smallest possible number.

b Based on your answer from 4b,

- suggest
- i the greatest possible number;
 - ii the smallest possible number.



Workbook: Exercise 4, Page 14 to 16

Lesson 5 Rounding Numbers To The Nearest Hundred



Let's Find Out

Gilang had a box of game cards. He guessed he had roughly 300 cards. Which of the following would possibly be the actual number of cards he had?

99

299

999

249

Can you help him?



Let's Learn

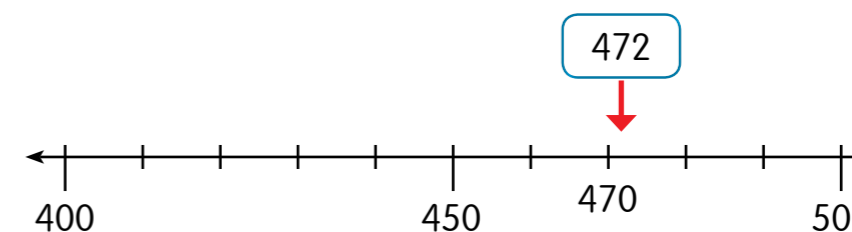
1 The masses of 3 boxes are measured and listed in the table below.

Box	Mass (g)
X	472
Y	6548
Z	23 675



How do we round the mass of each box to the nearest hundred?

a Let's place 472 on the number line.



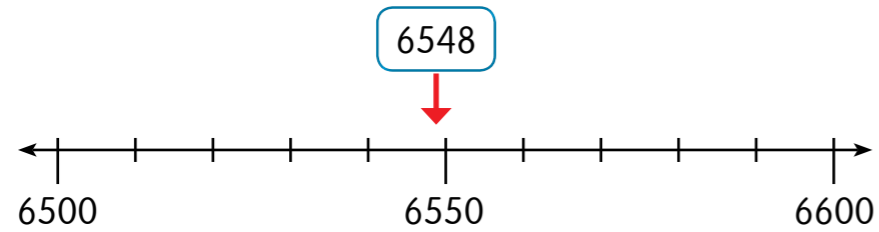
472 is nearer to 500 than to 400.

So, 472 is 500 when rounded to the nearest hundred.

472 is approximately equal to 500.

472 g \approx 500 g

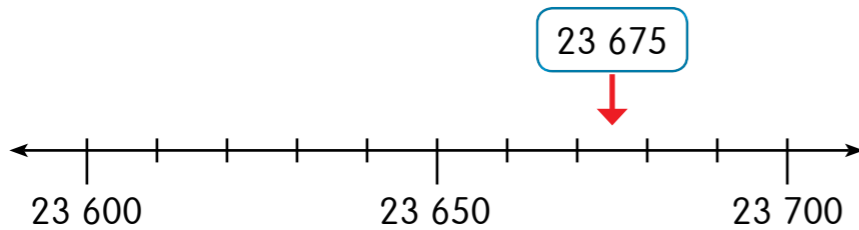
- b Let's place 6548 on the number line.



6548 is nearer to 6500 than to 6600.
So, 6548 is 6500 when rounded to the nearest hundred.
6548 is approximately equal to 6500.

$$6548 \text{ g} \approx 6500 \text{ g}$$

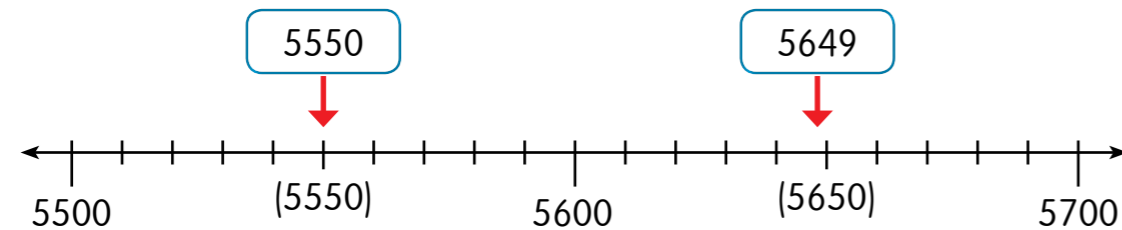
- c Let's place 23 675 on the number line.



23 675 is nearer to 23 700 than to 23 600.
So, 23 675 is 23 700 when rounded to the nearest hundred.
23 675 is approximately equal to 23 700.

$$23\ 675 \text{ g} \approx 23\ 700 \text{ g}$$

- 2 A number is 5600 when rounded to the nearest hundred. Let's find all the possible numbers that give 5600 when rounded to the nearest hundred.



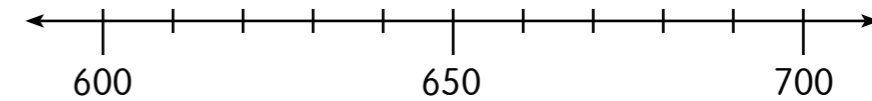
There are many possible answers from 5550 to 5649.
5550, 5551, 5552, ..., 5646, 5647, 5648, 5649
The smallest number is 5550.
The greatest number is 5649.
All give the answer **5600** when rounded to the nearest hundred.



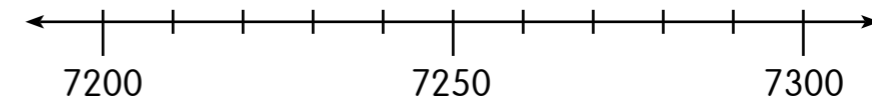
Let's Practise

- 1 Indicate each number on the number line with an arrow (↓).
Round the number to the nearest hundred and circle the answer.

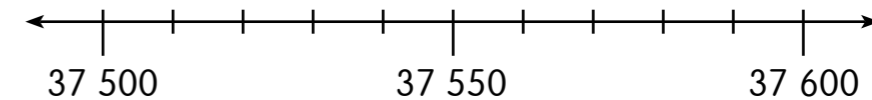
- a 652



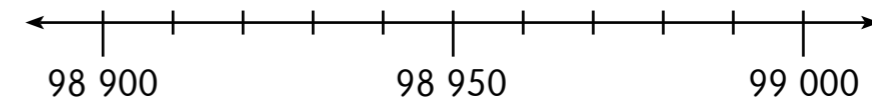
- b 7249



- c 37 588

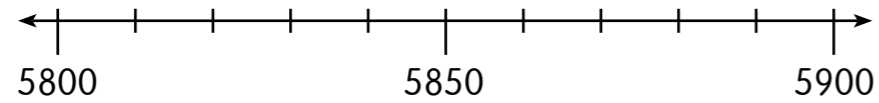


- d 98 924



2 Study the number line and fill in the blanks.

a 5821



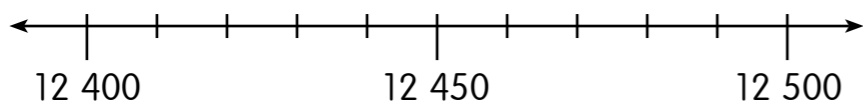
5821 is between and .

It is nearer to than to .

5821 is when rounded to the nearest hundred.

5821 \approx

b 12 451



12 451 is between and .

It is nearer to than to .

12 451 is when rounded to the nearest hundred.

12 451 \approx

3 Round the following numbers to the nearest hundred.

a 650 \approx

b 7209 \approx

c 67 849 \approx

d 98 163 \approx

4 The following numbers are the answers when rounded to the nearest hundred.

a 700

b 9200

c 38 600

d 55 900

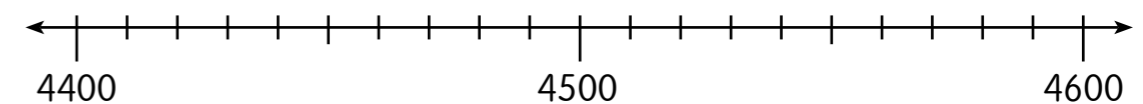
For each answer, state the **i** greatest possible number;

ii smallest possible number.

5 Fill in the boxes in the table below with approximate answers.

Rounded to nearest ...	36	528	2891	91 655
ten	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
hundred	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

6 A number is 4500 when rounded to the nearest hundred.



a What is the smallest possible number?

b What is the greatest possible number?





Let's Find Out

Widy has 28 muffins and Harto has 58 muffins.
 Can you make a rough guess of how many muffins they have altogether?
 They decide to pack all of their muffins into boxes of 10 muffins each.
 Make a good guess of how many boxes you think they might need.



Let's Learn

1 Addition and Subtraction

a Let's estimate the value of $63 + 85$.

Round each number to the nearest ten.

$$63 \approx 60$$

$$85 \approx 90$$

$$60 + 90 = 150$$

So, $63 + 85 \approx 150$.

The value of $63 + 85$ is about 150.

The actual answer of 148 is close to the estimate of 150.

So, the answer is reasonable.

How do I know if my answer is reasonable?



Work out the actual answer.

$$\begin{array}{r} 63 \\ 85 \\ \hline 148 \end{array} +$$



b Estimate $346 - 39$.

Round each number to the nearest ten.

$$346 \approx 350$$

$$39 \approx 40$$

$$350 - 40 = 310$$

So, $346 - 39 \approx 310$.

The value of $346 - 39$ is about 310.

The actual answer of 307 is close to the estimate of 310.

So, the answer is reasonable.

$$\begin{array}{r} 346 \\ - 39 \\ \hline 307 \end{array} -$$

c Estimate $589 - 211$.

Round each number to the nearest hundred.

$$589 \approx 600$$

$$211 \approx 200$$

$$600 - 200 = 400$$

So, $589 - 211 \approx 400$.

$$\begin{array}{r} 589 \\ - 211 \\ \hline 378 \end{array} -$$

The value of $589 - 211$ is about 400.

The actual answer of 378 is close to the estimate of 400, so the answer is reasonable.

d Estimate $8227 + 2691$.

Round each number to the nearest hundred.

$$8227 \approx 8200$$

$$2691 \approx 2700$$

$$8200 + 2700 = 10\,900$$

So, $8227 + 2691 \approx 10\,900$.

$$\begin{array}{r} 8227 \\ + 2691 \\ \hline 10918 \end{array} +$$

The value of $8227 + 2691$ is about 10 900.

The actual answer of 10 918 is close to the estimate of 10 900.

So, the answer is reasonable.

2 Multiplication and Division

a Let's estimate the value of 36×5 .

Round 36 to the nearest ten.

$$36 \approx 40$$

$$40 \times 5 = 200$$

So, $36 \times 5 \approx 200$.

The value of 36×5 is about 200.

The actual answer of 180 is close to the estimate of 200.

So, the answer is reasonable.

Is my answer reasonable?

$$\begin{array}{r} 36 \\ \times 5 \\ \hline 180 \end{array} \times$$



- b** Estimate 729×8 .
Round 729 number to the nearest hundred.

$$729 \approx 700$$

$$700 \times 8 = 5600$$

So, $729 \times 8 \approx 5600$.

The value of 729×8 is about 5600.

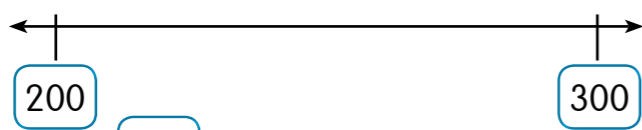
The actual answer of 5832 is close to the estimate of 5600.

So, the answer is reasonable.

$$\begin{array}{r} 729 \\ \times 8 \\ \hline 5832 \end{array}$$

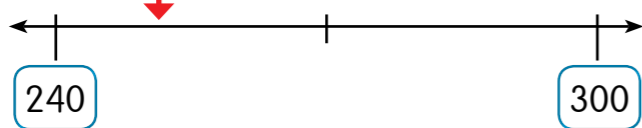
- c** Estimate $252 \div 6$.

Instead of



Here, I have to round 252 to the closest number that can be divided by 6.

We use



252 is closer to 240 than to 300.

$$252 \approx 240$$

$$240 \div 6 = 40$$

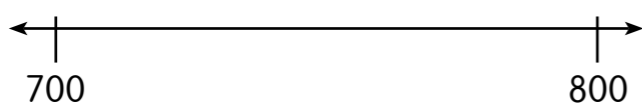
So, $252 \div 6 \approx 40$.

The value of $252 \div 6$ is about 40.



- d** Estimate $768 \div 8$.

Instead of



Again, I have to round 768 to the closest number that can be divided by 8.

We use



768 is closer to 800 than to 720.

$$768 \approx 800$$

$$800 \div 8 = 100$$

So, $768 \div 8 \approx 100$.

The value of $768 \div 8$ is about 100.



Let's Practise

- 1** Round each number to the nearest ten.
Then estimate the value of the following:

a $27 + 68$

$$27 \approx \square$$

$$68 \approx \square$$

$$\square + \square = \square$$

So, $27 + 68 \approx \square$.

b $562 - 75$

$$562 \approx \square$$

$$75 \approx \square$$

$$\square - \square = \square$$

So, $562 - 75 \approx \square$.

c $326 + 49$

$$326 \approx \square$$

$$49 \approx \square$$

$$\square + \square = \square$$

So, $326 + 49 \approx \square$.

- 2** Round each number to the nearest hundred.
Then estimate the value of the following:

a $825 + 387$

$$825 \approx \square$$

$$387 \approx \square$$

$$\square + \square = \square$$

So, $825 + 387 \approx \square$.

b $6123 - 2781$

$$6123 \approx \square$$

$$2781 \approx \square$$

$$\square - \square = \square$$

So, $6123 - 2781 \approx \square$.

c $5628 + 7962$

$$5628 \approx \square$$

$$7962 \approx \square$$

$$\square + \square = \square$$

So, $5628 + 7962 \approx \square$.

3 Round each number to the nearest ten.
Then estimate the value of the following:

a 66×6

$66 \approx \square$

$\square \times 6 = \square$

So, $66 \times 6 \approx \square$.

b 98×5

$98 \approx \square$

$\square \times 5 = \square$

So, $98 \times 5 \approx \square$.

4 Round each number to the nearest hundred.
Then estimate the value of the following:

a 371×7

$371 \approx \square$

$\square \times 7 = \square$

So, $371 \times 7 \approx \square$.

b 984×8

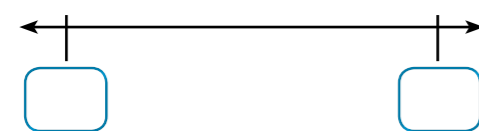
$984 \approx \square$

$\square \times 8 = \square$

So, $984 \times 8 \approx \square$.

5 Estimate the value of the following:

a $289 \div 4$

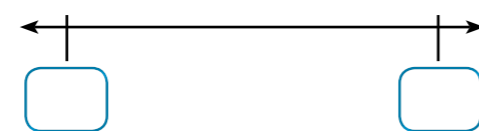


$289 \approx \square$

$\square \div 4 = \square$

So, $289 \div 4 \approx \square$.

b $624 \div 7$



$624 \approx \square$

$\square \div 7 = \square$

So, $624 \div 7 \approx \square$.

6 Estimate the value of the following:

a 63×3

b 847×2

c 956×6

7 Estimate the value of the following:

a $342 \div 5$

b $536 \div 8$

c $627 \div 9$

8 The table shows the different lengths of strings.

String	Length (cm)
A	56
B	84
C	376
D	253

a Estimate the total length of 8 pieces of String A.

b Estimate the total length of String A and String B.

c Estimate the total length of String C and String D by rounding to the nearest hundred.

d Estimate the total length of 5 pieces of String D.



Workbook: Exercise 6, Page 20 to 22



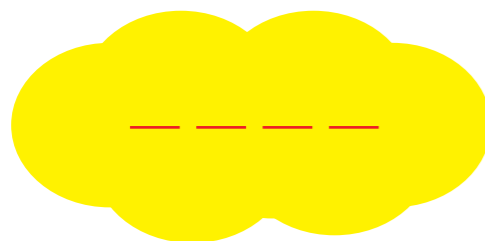
What Am I?

I am a number with 4 digits.

The digit in the hundreds place is 2 more than the digit in the ones place. The digit in the tens place has no value.

The digit in the thousands place is divisible by 5 and is one less than the digit in the hundreds place.

What number am I?



What Can I be?

I have 5 digits.

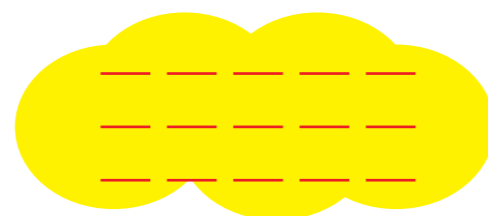
The last 2 digits are the same.

The first digit is the largest even number. The last digit differs from the first digit by 5.

The digit in thousands place is a multiple of 3.

The digit in the hundreds place is 4 more than the digit in the ones place.

What numbers can I be?



Materials: Counters (10 000, 1000, 100, 10, 1)

Number of players: 3 – 4

- How to play:
- 1 A member puts out any number of each counter to form a number. He then covers it up.
 - 2 Other members in the group then take turns to ask that first member a variety of questions related to the number formed, in an attempt to guess it.

For example: What is the value of the digit in the thousands place?
What is 10 000 more than the number?
Round the number to the nearest ten/hundred.

- 3 Every number guessed correctly earns that member a point.
- 4 If a number is guessed incorrectly, another member can attempt to guess it, earning that point for themselves.
- 5 This is now repeated for a next member in the group. A few rounds can be played and the member with the most points wins!

