

1

Numbers to 1000

> 1.1 Hundreds, tens and ones

Exercise 1.1

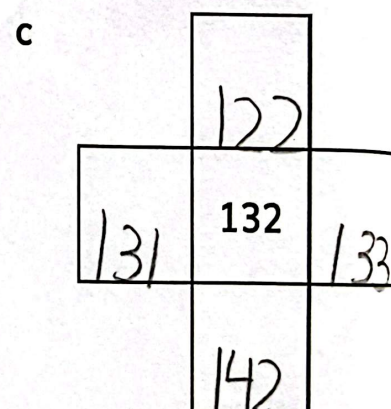
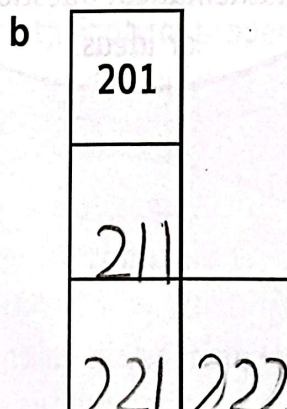
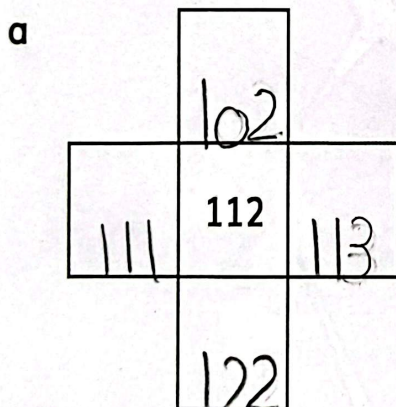
Focus

thousand

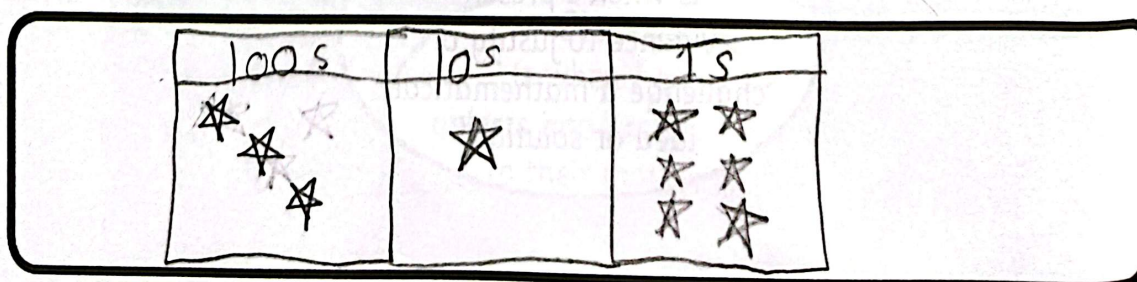
- Here is the last row of a 100 square. Write the numbers in the next row, which is the first row of the 101 to 200 square.

91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110

- Complete these pieces from a 1 to 1000 number strip.



- Draw a representation of 316.
How will you show the value of each digit?



24-8-26

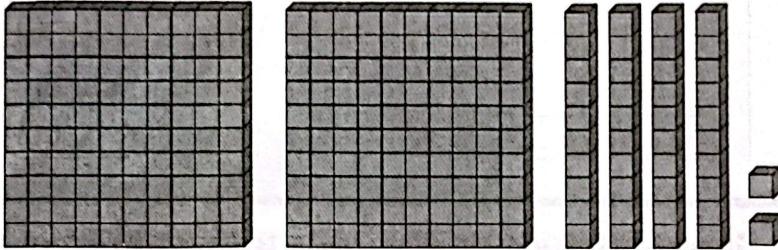
1.1 Hundreds, tens and ones

Now write this number in words.

Three hundred and sixteen.

4 What 3-digit numbers are represented below?

a

242

b

100s	10s	1s

513

5 What is the value of the ringed digit in each 3-digit number?

① 64 1 hundred, 10023 ⑦ 7 ones, 731 ⑤ 5 ones, 51 ② 8 2 tens, 20④ 52 4 hundred, 4003 ⑧ 1 8 tens, 80

Which hundreds values have not been used in these numbers?

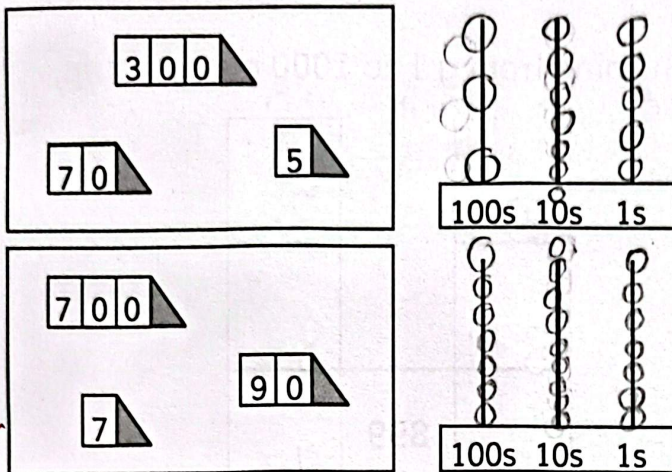
300, 200, 100, 300, 30

Practice

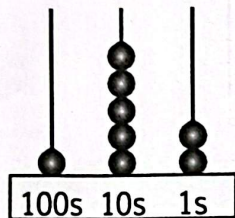
6 Write the numbers in the next row of the 1 to 1000 strip.

351	352	353	354	355	356	357	358	359	360
361	362	363	364	365	366	367	368	369	370

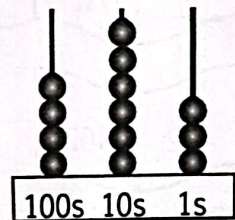
- 7 Draw beads on each abacus to represent each 3-digit number.



- 8 Which 3-digit number is represented on each abacus? Write each number in words.



152 = One hundred and fifty two.



463 = four hundred and sixty three

- 9 Write this 3-digit number in words.

100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9

$700 + 50 + 3 = 753$ seven hundred fifty three.

Challenge

10 Complete these pieces, which come from a 1 to 1000 number strip.

497			500	878		880
507			510	888		890
				898	899	900
517	518	519	520	908		910
				918		920

11 Write the missing numbers on each worm.

157	167	177	187	197	207	217	227	237	247
372	382	392	402	412	422	432	442	452	462
733	743	753	763	773	783	793	803	813	823

12



When you have two different digit cards, you can make two different 2-digit numbers. So when you have three different digit cards, you must be able to make three different 3-digit numbers.

Is Arun correct? How do you know?

13 Read along each row to find three 3-digit numbers.

5	4	6
3	1	8
9	7	2

Read down each column to find another three 3-digit numbers.

Write each number in words.

five hundred and forty six.

Three hundred and eighteen.

nine hundred and seventy two.

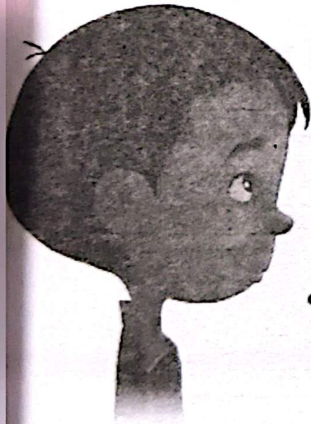
fife hundred and thirty nine.

four hundred and seventeen.

six hundred and eighty two.

25
Aug 26

1.1 Hundreds, tens and ones



When you have two different digit cards, you can make two different 2-digit numbers. So when you have three different digit cards, you must be able to make three different 3-digit numbers.

Is Arun correct? How do you know?

No he is incorrect.

We use 1, 5, 3 and we make

✓ 135, 351, 513, 531, 153.

Read along each row to find three 3-digit numbers.

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Read down each column to find another

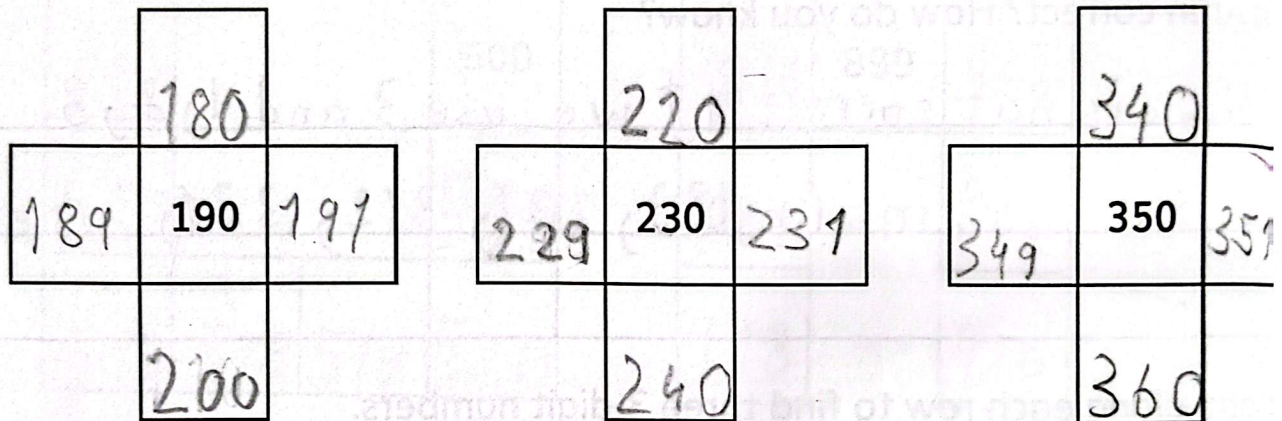
> 1.2 Comparing and ordering

Exercise 1.2

inequality is greater than, >
is less than, <

Focus

- 1 Complete these pieces, which come from a 1000 strip.



- 2 Compare these numbers and complete the sentences.

100s	10s	1s
2	4	9
1	7	3

173 is less than 249 and

249 is greater than 173.

- 3 Write the statements in question 2 using the symbols < and >.

173 < 249

249 > 173

- 4 Order these numbers from smallest to greatest.

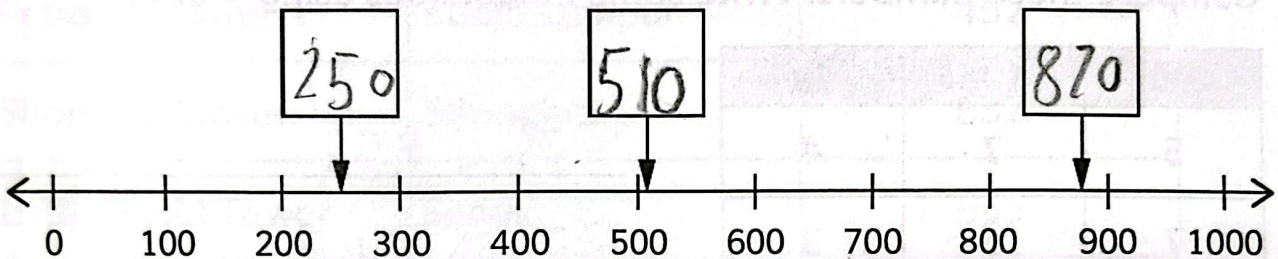
327	79	236	64	142
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64 79 142 236 327

smallest

greatest

- 5 Estimate the value of each number marked on the number line.



Practice

- 6 Use $<$ and $>$ to write two inequalities about these numbers.

100s	10s	1s
4	5	6
4	6	5

$$456 < 465$$

$$465 > 456$$

- 7 Order these numbers from greatest to smallest.

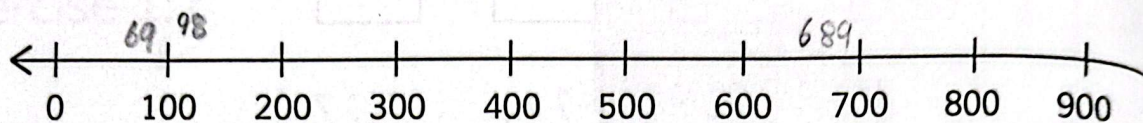
968	689	98	69	896
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968 896 689 98 69

greatest

smallest

8 Mark the numbers from question 7 on the number line.



Challenge

9 Compare these numbers. Write some inequalities using $<$ or $>$.

100s	10s	1s
5	7	4
7	5	3
5	4	7

$$574 < 753$$

$$753 > 547$$

$$547 < 574 < 753$$

10 Yusef looks at the place value grid in question 9 and writes:

$$547 < 753 > 574$$

$$753 > 547 < 574$$

Write some more inequalities like those written by Yusef.

$$574 > 547 < 753 \quad 547 < 574 < 753$$

11 What could the missing digit be in each of these inequalities?

$$634 < 6 \boxed{4} 1$$

$$765 > \boxed{4} 83$$

$$257 > 25 \boxed{3}$$

$$372 < \boxed{7} 72$$

Record all the possible solutions to $372 < \boxed{8} 72$

$$472, 572, 672, 772, 872, 972$$

12 Order the heights of these towers from shortest to tallest.

Name of tower	Location	Height in metres
Lakhta Centre	St Petersburg	462
Willis Tower	Chicago	442
Burj Khalifa	Dubai	828
Petronas Tower 1	Kuala Lumpur	452
Shanghai Tower	Shanghai	632
Lotte World Tower	Seoul	555

Heights in metres:

442 452 462 555 632 828

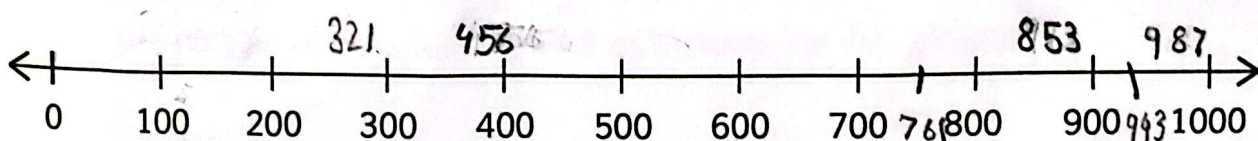
shortest tallest

13 Write the digits 1 to 9 anywhere in the grid.

Read across and down the grid to find six 3-digit numbers.

Mark each number on the number line.

9	8	7
4	5	6
3	2	1

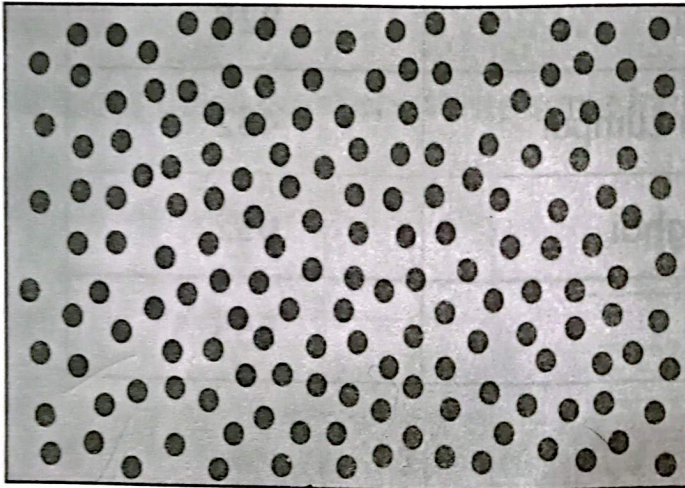


> 1.3 Estimating and rounding

Exercise 1.3

Focus

- 1 Estimate how many dots there are in the box.



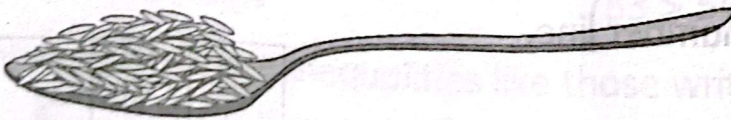
estimate
round, round

1500

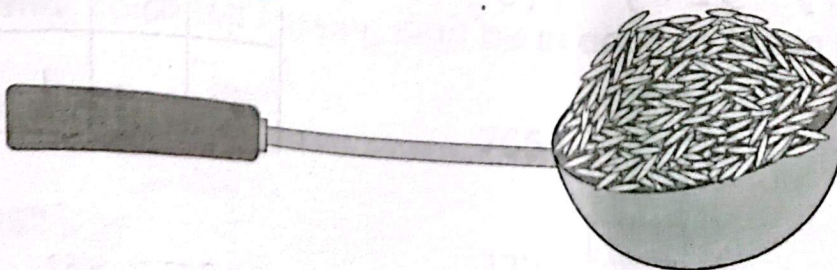
- 2 Estimate how many grains of rice are on the middle spoon.



estimate: 100 – 200



estimate: 150 – 200



estimate: 400 – 600

Round each number to the nearest 10.

271 270

138 140

397 400

404 400

Round each number to the nearest 100.

164 200

325 300

449 400

250 300

Practice

- 5 Class 3 used this table to make estimates of the number of grains in different plastic bags.

Mass of grains	Number of grains
5 grams	100
10 grams	200
15 grams	300
20 grams	400
25 grams	500

Mass of grains	Number of grains
30 grams	600
35 grams	700
40 grams	800
45 grams	900
50 grams	1000

- a Samira estimates that her plastic bag had 300 to 400 grains. They weighed 18 grams. Is this a good estimate?

yes

- b Pedro's grains weighed 31 grams. What range would be a good estimate for his grains?

600-700

6 Round each amount to the nearest \$10.

\$537 \$540

\$772 \$770 ⁷⁷⁰

\$695 \$700

\$808 \$810

7 Round each amount to the nearest 100 kilograms.

✓ 150 kilograms 200 kilograms

555 kilograms 600 kilograms

444 kilograms 400 kilograms

501 kilograms 500 kilograms
✓



Challenge

Round the height of each tower to the nearest 10 metres and to the nearest 100 metres.

Name of tower	Location	Height in metres	Nearest 10 metres	Nearest 100 metres
Lakhta Centre	St Petersburg	462	460	500
Willis Tower	Chicago	442	440	400
Burj Khalifa	Dubai	828	830	800
Petronas Tower 1	Kuala Lumpur	452	460	500
Shanghai Tower	Shanghai	632	630	600
Lotte World Tower	Seoul	555	560	600

Which towers round to the same height when their heights are rounded to the nearest 100 metres?

Willis, Burj Khalifa, Shanghai tower ~~Estimation~~

0 Zara rounds a number to the nearest 10 and to the nearest 100. Her answer both times is 500.

What could her number be? Record all the possible answers. See

495

496

497

498

499

3
Sep

12 In a shop, all prices are rounded to the nearest \$10.
Would all the customers be happy about the changes in price?
Explain your answer.

All customers will not be happy because
some prices were increased after rounding

sep