Place Value and Rounding

Recap Challenge Questions

Tommy says he can order the following numbers by only looking at the first three digits.

12,516

12,832

12,679

12,538

12,794

Is he correct?

Explain your answer.

Solve

CCCL + CL =

How many calculations, using Roman Numerals, can you write to get the same total?

1	I	11	XI	50	L	
2	II	12	XII	100	C	
3	III	13	XIII	500	D	
4	IV	14	XIV	1000	M	
5	V	15	XV			
6	VI	16	XVI			
7	VII	17	XVII			
8	VIII	18	XVIII			
9	IX	19	XIX			
10	X	20	XX			

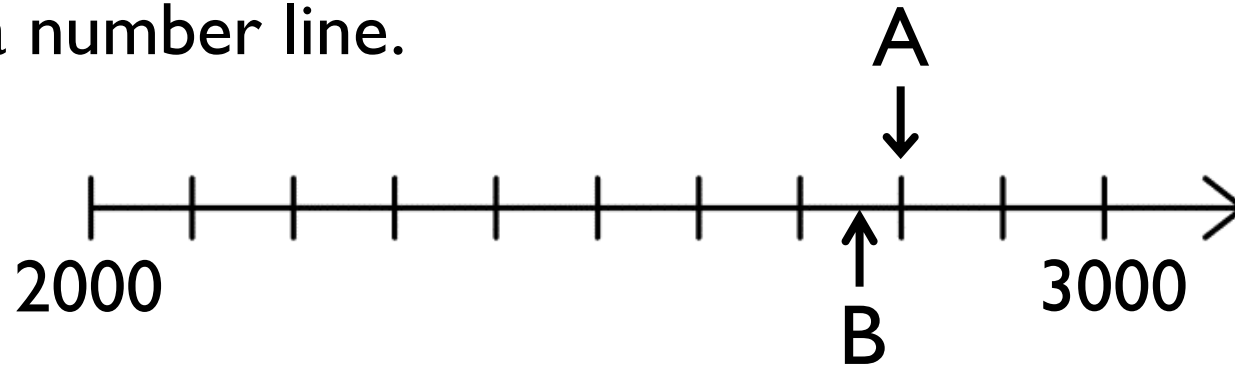> 2,567 to the nearest 100 is 2,500

Whitney

Do you agree with Whitney?

Explain why.

Here is a number line.

What is the value of A?

B is 40 less than A.
What is the value of B?

C is 500 less than B.
Add C to the number line.

Here are three ways of partitioning 27,650

27 thousands and 650 ones
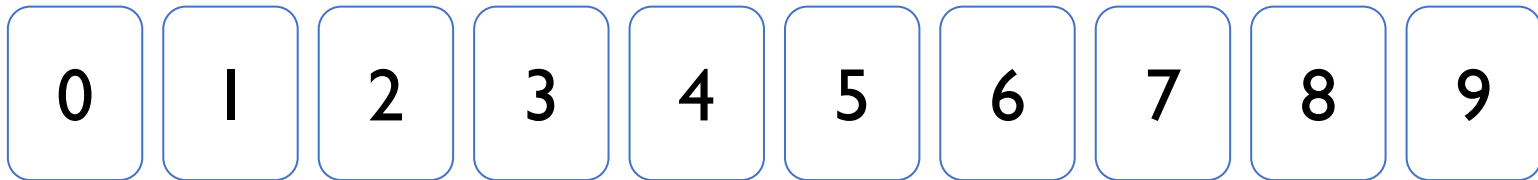27 thousands, 5 hundreds and 150 ones
27 thousands and 65 tens

Write three more ways.

Place the digits cards 0 to 9 face down and select five of them.

Make the greatest number possible and the smallest number possible.

How do you know which is the greatest or smallest?

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Round 59,996 to the nearest 1,000
Round 59,996 to the nearest 10,000

What do you notice about the answers?

Can you think of three more numbers where the same thing could happen?

Two 5-digit numbers have a difference of five.

When they are both rounded to the nearest thousand, the difference is 1,000

What could the numbers be?

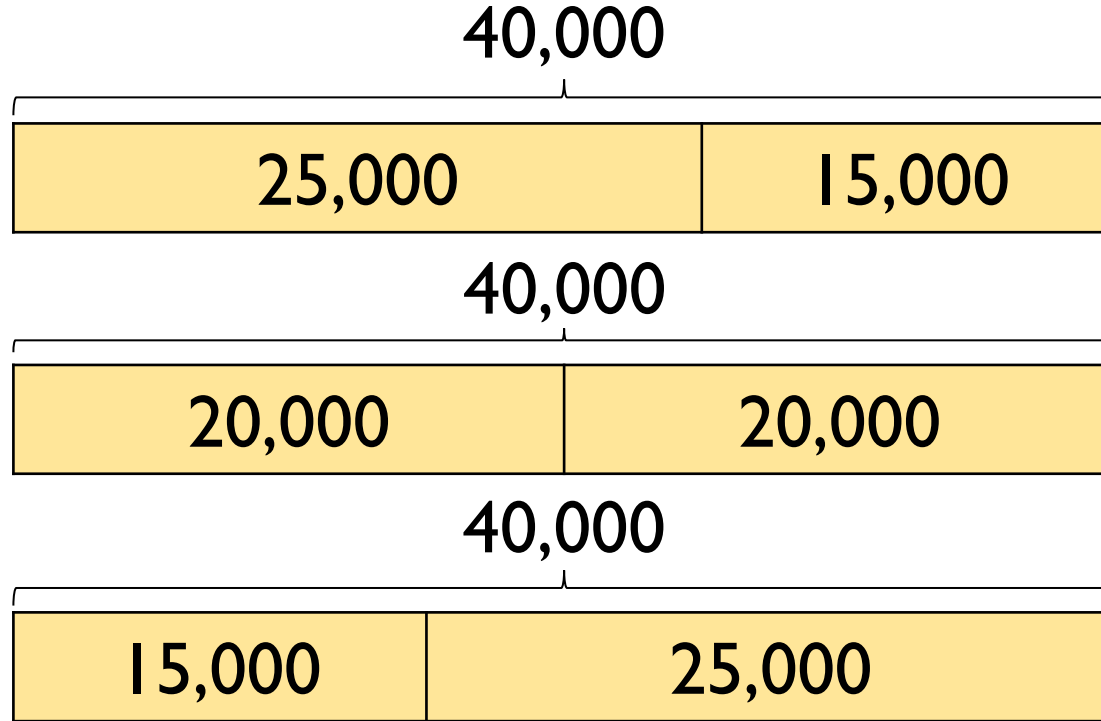Describe the value of the digit 7 in each of the following numbers.

How do you know?

407,338

700,491

25,571

The bar models are showing a pattern.

40,000

| 25,000 | 15,000 |

40,000

| 20,000 | 20,000 |

40,000

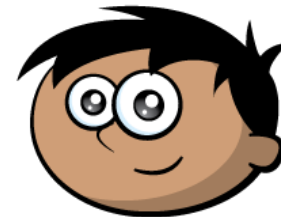| 15,000 | 25,000 |

Draw the next three.

Create your own pattern of bar models for a partner to continue.

Amir writes the first five numbers of a sequence.

They are:

3,666, 4,666, 5,666, 6,666, 7,666

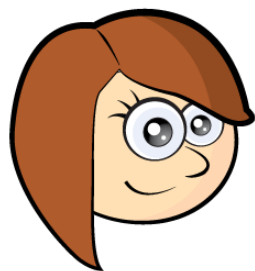The 10th term will be 15,322 because I will double the 5th term.

Amir

Is he correct?
Explain why.

I am counting up in 10s from 184
I will include 224

Mo

I am counting up in 100s from 604
I will include 1,040

Rosie

I am counting up in 1,000s from 13
I will include 130,000

Jack

Who has made a mistake?
Identify anyone who has made a mistake and explain how you know.

Here are four number cards.

| 42,350 | 56,995 | 43,385 | 56,963 |

Four children take one each and say a clue.

My number is 57,000 when rounded to the nearest 100

My number has exactly three hundreds in it

My number is 43,000 when rounded to the nearest thousand

My number is exactly 100 less then 57,063

Which card did each child have?

True or False?

- The temperature outside is -5 degrees, the temperature inside is 25 degrees.
    The difference is 20 degrees.

- Four less than negative six is negative two.

- 15 more than -2 is 13

Explain how you know each statement is true or false.

Put these statements in order so that the answers are from smallest to greatest.

- The difference between −24 and −76

- The even number that is less than −18 but greater than −22

- The number that is half way between 40 and −50

- The difference between −6 and 7

Round 5,245,876

to the nearest 1,000,000

to the nearest 100,000

to the nearest 10,000

to the nearest 1,000

The **difference** between two numbers is 4.

When each number is rounded to the nearest hundred, the difference between them is 100.

Write down what the two numbers could be

[ ] and [ ]

Justin chooses two of these cards.

| 13 | 21 | 29 | 38 |

He adds the numbers on the two cards together
He then rounds the result to the nearest 10

His answer is 40.

Circle the two numbers that Justin chose

Complete this table by rounding the numbers to the **nearest hundred**

	Rounded to the nearest hundred
10,805	
1,080.5	
108.05	

740 to the nearest 100

<div style="border:1px solid black"> </div>

1,247 to the nearest 10

<div style="border:1px solid black"> </div>

$2\dfrac{3}{4}$ to the nearest whole number

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Frank thinks of a **whole** number.

He multiples it by 6.
He rounds his answer to the nearest 10

The answer is 70

Write **all** the possible numbers that Frank could have started with