16.9.24

MPI: Powers of 10

1 **a)** Draw counters to show 342 on a place value chart.

b) Draw counters to show 3,420 on a place value chart.

c) Draw counters to show 34,200 on a place value chart

What is the same? What is different?

2 **a)** How many ones are there in 10?

b) How many tens are there in 100?

c) How many hundreds are there in 1,000?

d) How many thousands are there in 10,000?

What do you notice?

3 **a)** How many hundreds are there in 2,000?

b) How many hundreds are there in 4,000?

c) How many hundreds are there in 4,300?

d) How many hundreds are there in 4,700?

1 metre is 100 times the size of 1 centimetre.

There are 100 cm in 1 m.

1 m	1 m	1 m	1 m
100 cm	100 cm	100 cm	100 cm

How many centimetres are there in each measurement?

a) 4 m **b)** 400 m **c)** 4,000 m **d)** 4,400 m

16.9.24

MPI: Powers of 10

1 **a)** Draw counters to show 342 on a place value chart.

b) Draw counters to show 3,420 on a place value chart.

c) Draw counters to show 34,200 on a place value chart.

What is the same? What is different?

2 **a)** How many ones are there in 10?

b) How many tens are there in 100?

c) How many hundreds are there in 1,000?

d) How many thousands are there in 10,000?

What do you notice?

3 **a)** How many hundreds are there in 2,000?

b) How many hundreds are there in 4,000?

c) How many hundreds are there in 4,300?

d) How many hundreds are there in 4,700?

1 metre is 100 times the size of 1 centimetre.

There are 100 cm in 1 m.

1 m	1 m	1 m	1 m
100 cm	100 cm	100 cm	100 cm

How many centimetres are there in each measurement?

a) 4 m **b)** 400 m **c)** 4,000 m **d)** 4,400 m

17.9.24

MPI: 10/100/1,000/10,000/100,000 more or less

Complete the number tracks:

a)	7	17		37	47		67
b)	169		149	139			109
c)	475		675		875		

Can you describe what is happening?

17.9.24

MPI: 10/100/1,000/10,000/100,000 more or less

Complete the number tracks:

a)	7	17		37	47		67
b)	169		149	139			109
c)	475		675		875		

Can you describe what is happening?

A number is represented on a Gattegno chart.

100,000	200,000	300,000	400,000	500,000	600,000	700,000	800,000	900,000
10,000	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000
1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000
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

What number is represented?

What is 100 more than the number?

What is 10,000 less than the number?

A number is represented on a Gattegno chart.

100,000	200,000	300,000	400,000	500,000	600,000	700,000	800,000	900,000
10,000	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000
1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000
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

What number is represented?

What is 100 more than the number?

What is 10,000 less than the number?

Complete the table:

Number	10 more	100 more	1,000 more	10,000 more	100,000 more
25					
250					
2,500					
25,000					
250,000					

Complete the table:

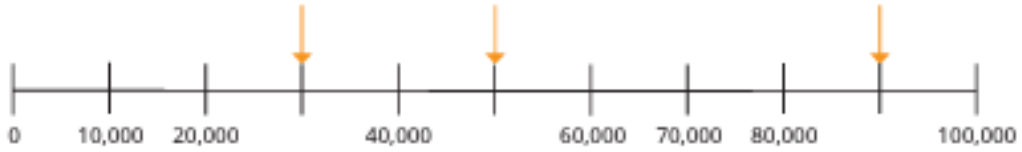
Number	10 more	100 more	1,000 more	10,000 more	100,000 more
25					
250					
2,500					
25,000					
250,000					

18.9.24

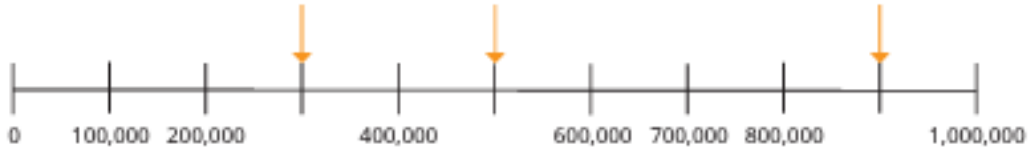
MPI: Number line to 1,000,000.

What numbers are the arrows pointing to?

a)



b)



Draw an arrow to show the position of 550,000 on each number line.

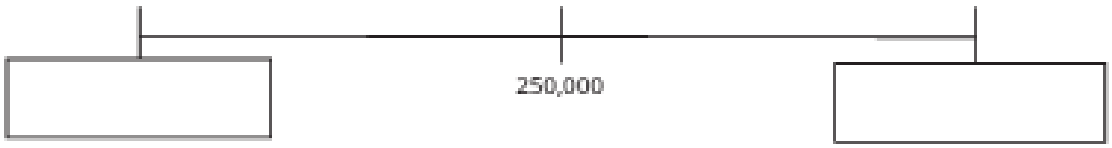
a)

b)

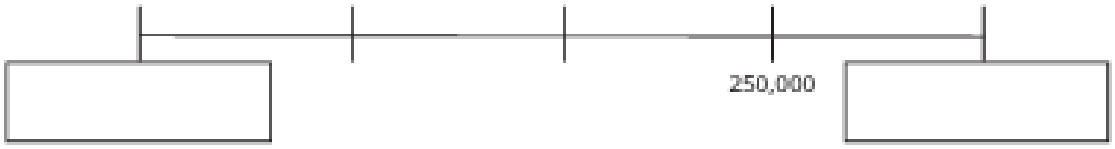
c)

What could the missing numbers be?

a)



b)



19.9.24

MPI: Compare and order numbers to 100,000.

Rosie and Jack have each made a number.

Rosie's number

TTh	Th	H	T	O
●●	●	●●	●●	●●●

Jack's number

TTh	Th	H	T	O
●●●	●●●	●●	●●	●●●

_____

_____

_____

_____

a) Who has made the greater number?

How do you know?

Write <, > or = to compare the numbers.

a) 908 ◯ 909

b) 81,227 ◯ 80,999

c) 7,163 ◯ 7,262

d) 982 + 1 ◯ 984 – 1

e) 200 ◯ 29

f) 300 + 27 ◯ 200 + 127

g) 4,000 + 10,000 ◯ 13,000

h) 19,000 + 70 + 200 ◯ 19,270

Use the numbers to label the number line.

67,550 63,570 64,450 61,800

What do you notice?

There is a digit missing from each statement.

Write all the possible digits that could make each statement correct.

a) 9,751 < 9,_83

b) 9,751 < 9,_15

c) 9,751 < 9,7_6

16.9.24

MPI: Powers of 10 CHALLENGE

The children choose one of these number cards each.

29,000	290	2,900	290,000

Tommy: My number is ten times the size of Annie's.

Whitney: Dexter's number is one-tenth the size of my number.

Annie: My number has two hundreds.

Dexter: My number is one hundred times the size of Annie's.

Which number does each child have?

16.9.24

MPI: Powers of 10 CHALLENGE

The children choose one of these number cards each.

29,000	290	2,900	290,000

Tommy: My number is ten times the size of Annie's.

Whitney: Dexter's number is one-tenth the size of my number.

Annie: My number has two hundreds.

Dexter: My number is one hundred times the size of Annie's.

Which number does each child have?

17.9.24

MPI10,100,1000,10000,100000 more or less CHALLENGE

Emma is planting flowers in her garden. She has a garden bed that is **10,500 centimetres** long. She bought four rolls of garden fabric to cover the soil:

1. The first roll covers **2,345 centimetres**.
2. The second roll covers **1,200 centimetres**.
3. The third roll covers **1,000 centimetres** more than the second roll.
4. The fourth roll covers **100 centimetres** less than the third roll.

Help Emma to find out how much of the garden bed is still uncovered after laying down all the rolls offabric.

17.9.24

MPI10,100,1000,10000,100000 more or less CHALLENGE

Emma is planting flowers in her garden. She has a garden bed that is 10,500 centimetres long. She bought four rolls of garden fabric to cover the soil:

1. The first roll covers 2,345 centimetres.
2. The second roll covers 1,200 centimetres.
3. The third roll covers 1,000 centimetres more than the second roll.
4. The fourth roll covers 100 centimetres less than the third roll.

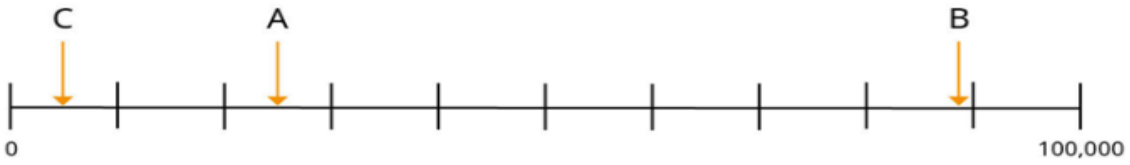
Help Emma to find out how much of the garden bed is still uncovered after laying down all the rolls of fabric.

18.9.24

MPI: Number line to 1,000,000 CHALLENGE

pointing to.

a)



A = B = C =

b)

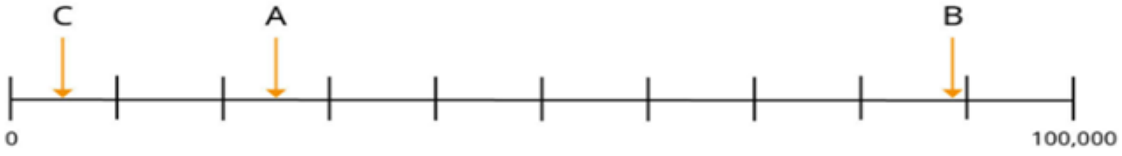
D = E = F =

18.9.24

MPI: Number line to 1,000,000 CHALLENGE

Estimate the number that each arrow is pointing to.

a)



A = B = C =

b)

D = E = F =

19.9.24 CHALLENGE

MPI: Compare and order numbers to 100,000

Here are five digit cards.

a) How many different 5-digit numbers can you make between 50,000 and 55,000 using the digit cards?

b) Write your answers in descending order.

19.9.24 CHALLENGE

MPI: Compare and order numbers to 100,000

Here are five digit cards.

8 5 7 4 9

a) How many different 5-digit numbers can you make between 50,000 and 55,000 using the digit cards?

b) Write your answers in descending order.

19.9.24 CHALLENGE

MPI: Compare and order numbers to 100,000

Here are five digit cards.

8 5 7 4 9

a) How many different 5-digit numbers can you make between 50,000 and 55,000 using the digit cards?

b) Write your answers in descending order.