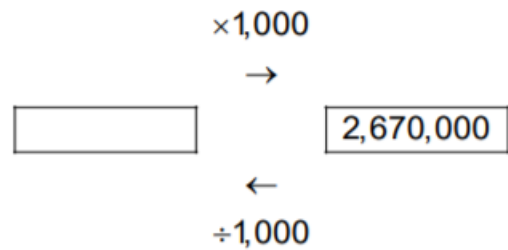
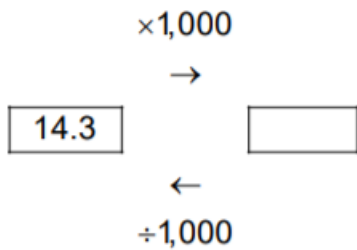
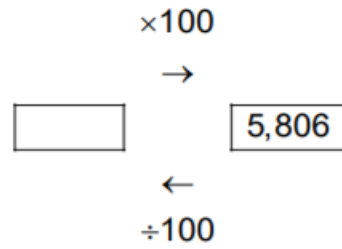
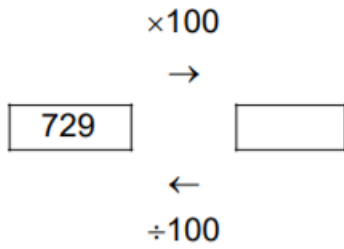




Monday 21.9.20

MPI using powers of 10

Spicy



Complete the sentences.

- a. 500 made 1,000 times the size is \_\_\_\_\_.
- b. 0.7 made 100 times the size is \_\_\_\_\_.
- c. 800,000 made 10 times the size is \_\_\_\_\_.
- d. 4,000,000 made one-thousandth times the size is \_\_\_\_\_.
- e. 9,000 made one-hundredth times the size is \_\_\_\_\_.
- f. 3 made one-tenth times the size is \_\_\_\_\_.
- g. The distance from London to Bristol is about 170km. The distance from London to Sydney, Australia is about 100 times as far. Approximately how far is it from London to Sydney?
- h. A newborn elephant weighs about 150kg. A newborn kitten weighs about 150g. How many times the mass of a newborn kitten is a newborn elephant?

Use the following to complete the equations:

$\times 10$      $\times 100$      $\times 1,000$      $\div 10$      $\div 100$      $\div 1,000$

Use each term only once.

$543 \boxed{\phantom{00}} = 5.43$	$3,169 \boxed{\phantom{00}} = 3,169,000$	$515 \boxed{\phantom{00}} = 5,150$
$276,104 \boxed{\phantom{00}} = 27,610.4$	$35,000 \boxed{\phantom{00}} = 35$	$427 \boxed{\phantom{00}} = 42,700$



Fill in the missing numbers in these calculations.

- a. (a)  $6 \div \underline{\hspace{2cm}} = 0.6$
- b. (b)  $\underline{\hspace{2cm}} \times 100 = 4500$
- c. (c)  $0.74 = 74 \div \underline{\hspace{2cm}}$
- d. (d)  $1000 \times \underline{\hspace{2cm}} = 65800$

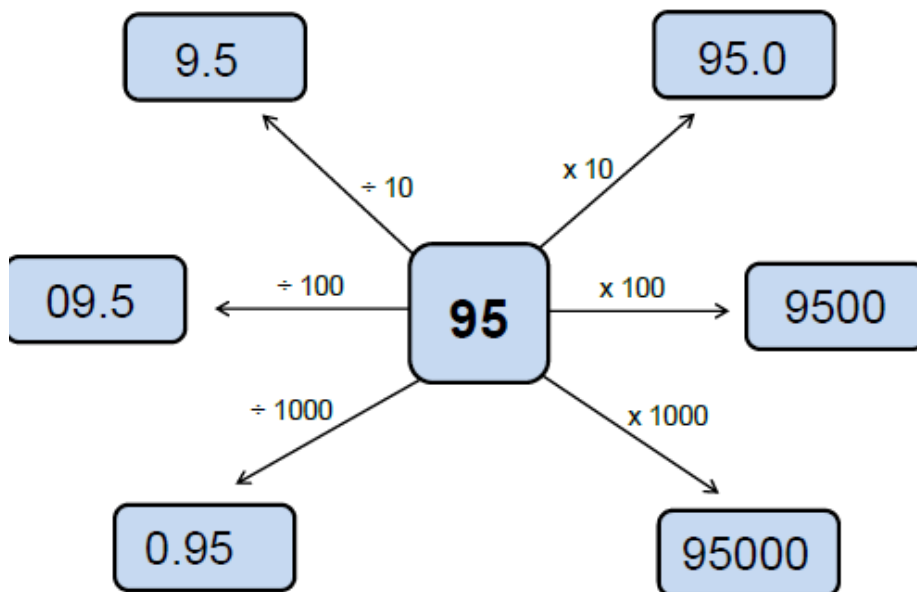
Each week Tom gets £5 spending money.

He spends 75p on a pick and mix each week.

He then saves the rest of the money.

How much money has Tom saved after 10 weeks?

Look at the diagram below. Tick the correct boxes and put a cross next to the incorrect ones. Journal on the next page to **explain** the correct answers.





Tuesday 22.9.20

Journaling—place value

Hot



Put these calculations in order from smallest to biggest.

$100 \times 540$   $5.4 \times 1000$   $5400 \div 10$   $5400 \div 1000$   $540 \div 10$



Tuesday 22.9.20

Journaling—place value

Hot



Put these calculations in order from smallest to biggest.

$100 \times 540$   $5.4 \times 1000$   $5400 \div 10$   $5400 \div 1000$   $540 \div 10$



Tuesday 22.9.20

Journaling—place value

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Tuesday 22.9.20

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Tuesday 22.9.20

Journaling—place value

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Tuesday 22.9.20  
Journaling—place value

Spicy



<b>6</b>	<b>x 10</b>	<b>x 10</b>	<b>÷ 100</b>
<b>÷ 10</b>	<b>x 100</b>	<b>x 100</b>	<b>÷ 10</b>
<b>x 10</b>	<b>÷ 10</b>	<b>÷ 1000</b>	<b>÷ 100</b>
<b>÷ 1000</b>	<b>x 1000</b>	<b>x 100</b>	<b>0.06</b>

Can you find a path from 6 to 0.06?

You are not allowed to make diagonal moves.



Tuesday 22.9.20  
Journaling—place value

Spicy



<b>6</b>	<b>x 10</b>	<b>x 10</b>	<b>÷ 100</b>
<b>÷ 10</b>	<b>x 100</b>	<b>x 100</b>	<b>÷ 10</b>
<b>x 10</b>	<b>÷ 10</b>	<b>÷ 1000</b>	<b>÷ 100</b>
<b>÷ 1000</b>	<b>x 1000</b>	<b>x 100</b>	<b>0.06</b>

Can you find a path from 6 to 0.06?

You are not allowed to make diagonal moves.



Tuesday 22.9.20  
Journaling—place value

Spicy



<b>6</b>	<b>x 10</b>	<b>x 10</b>	<b>÷ 100</b>
<b>÷ 10</b>	<b>x 100</b>	<b>x 100</b>	<b>÷ 10</b>
<b>x 10</b>	<b>÷ 10</b>	<b>÷ 1000</b>	<b>÷ 100</b>
<b>÷ 1000</b>	<b>x 1000</b>	<b>x 100</b>	<b>0.06</b>

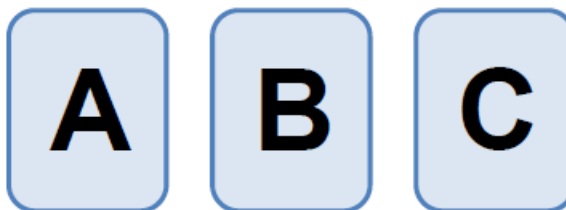
Can you find a path from 6 to 0.06?

You are not allowed to make diagonal moves.



Tuesday 22.9.20  
Journaling—place value

Extra spicy

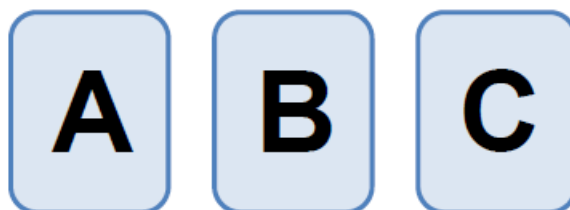


B is 10 times bigger than A  
C is 1000 times bigger than A  
What is the value of  $C \div B$ ?



Tuesday 22.9.20  
Journaling—place value

Extra spicy

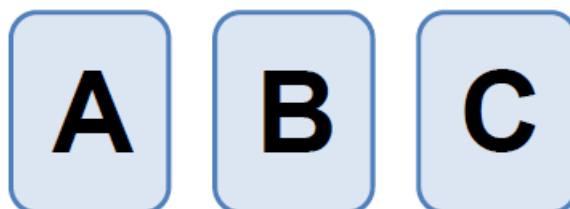


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Tuesday 22.9.20  
Journaling—place value

Extra spicy



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Tuesday 22.9.20  
Journaling—place value

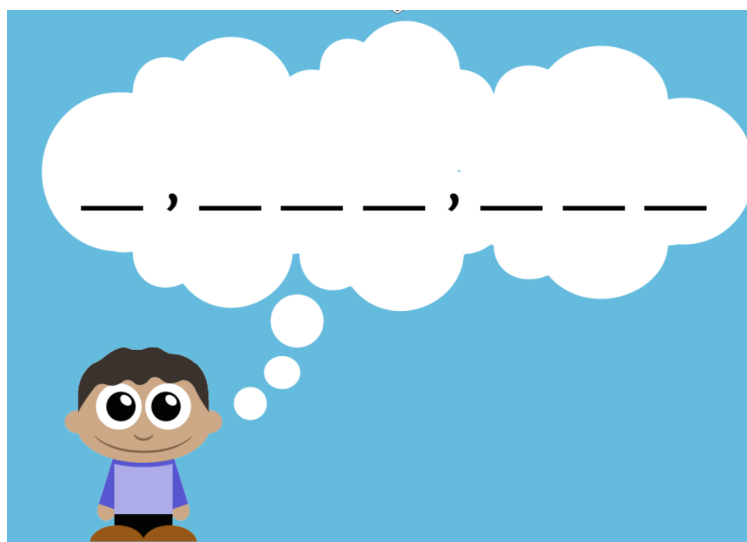
Extra spicy



Ahmed is thinking of a 7-digit number that rounds to 6,480,000 to the nearest ten-thousand.

The digits in the answer are all even, and the sum of the digits is 20.

How many possible numbers could Ahmed be thinking of?





Wednesday 23.9.20

MPI comparing and ordering large numbers

Hot



1 Circle the smaller number and fill in the blanks.

3 547 891

3 459 871

is greater than .

is less than .

2 Circle the larger number and fill in the blanks.

8 075 364

8 057 643

is greater than .

is less than .

3 Circle the greatest number.

(a) 6 782 600   6 872 000   6 678 200   6 867 200

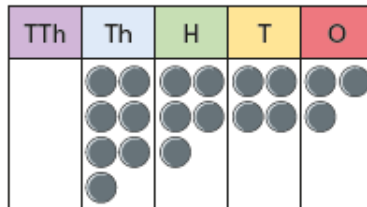
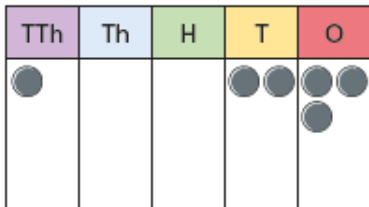
(b) 2 798 003   2 987 003   2 897 003   2 789 003

4 Circle the smallest number.

(a) 2 364 789   2 436 789   2 439 876   2 346 789

(b) 7 477 400   7 747 400   7 774 400   7 744 700

Tick the place value chart that represents the greatest number.



Explain your answer.

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Move one counter to make the other number the greatest.  
Draw your answer on the place value chart.



Wednesday 23.9.20

MPI comparing and ordering large numbers

Spicy



Fill in the blanks with > or <.

- (a) 1 200 569  1 205 096
- (b) 4 566 700  4 656 007
- (c) 6 933 057  5 976 330
- (d) 8 957 605  9 000 002

Write the missing digits to complete the number sentences.

- a)  $201 > 20\_$
- b)  $911 < \_99$
- c)  $63\_ < 631$

Write the house prices in order starting with the most expensive.




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Write these numbers in descending order.

- a) 325,906    328,000    325,960    33,000

---

Make six 7-digit numbers by using the digits 5, 5, 6 and 6 to fill in the blanks. Then arrange the numbers from the smallest to the greatest.

?	?	?	?	0	0	0
---	---	---	---	---	---	---





Wednesday 23.9.20

MPI comparing and ordering large numbers

Extra Spicy 

Write  $<$ ,  $>$  or  $=$  to compare the numbers.

- a) 345  543      d) 2,098  2,097
- b) 30,990  30,099      e) 20,000  19,999
- c) 1 million  1,553,680      f) 2.2 million  2,200,000

The table shows the lengths of 5 rivers.

River	Length (km)
Amazon	6,992
Congo	4,700
Grande	1,360
Fraser	1,368
Seine	776

Write the names of the rivers in order starting with the shortest.

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Eva has ordered eight 6-digit numbers.

- The smallest number is 542,900
- The biggest number is 547,000

What could the other six numbers be?

Write the numbers in ascending order.

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How many different ways can you arrange these digit cards so that the inequality is true?

1	3	4	7
---	---	---	---

4		3		2	0	0	<		6		2	1	0	0
---	--	---	--	---	---	---	---	--	---	--	---	---	---	---