

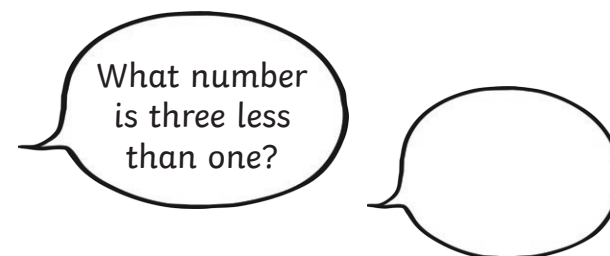


Year 6 Place Value Maths Chilli Challenge Cards



Counting

Use negative numbers in context, and calculate intervals across zero.

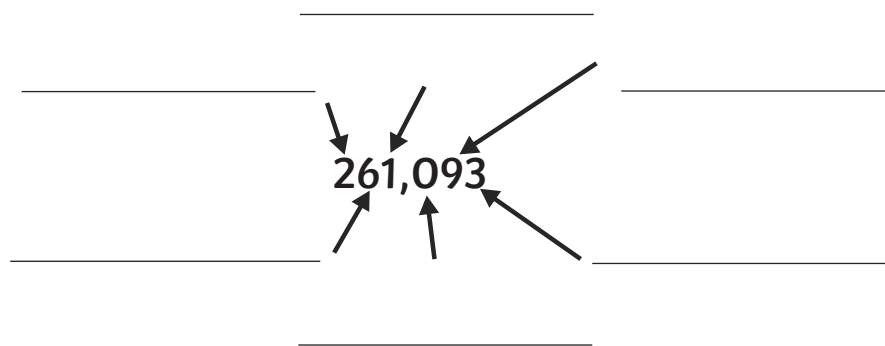


“Count forwards from -3.”

-3, _____, _____, 0, _____, 2, _____,

Place Value

Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.



Compare and Order

Order and compare numbers to at least 1,000,000 and determine the value of each digit. Write $<$, $>$ or $=$

151,515 151,155

Order the following:

722,727, 27,277, 727,272, 722,772

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smallest

greatest

Rounding

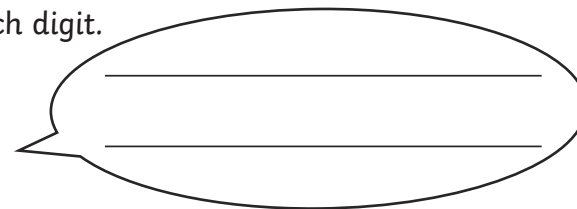
Explain why 67,286 could be rounded to 70,000.

Round 50 to the nearest 20.

Read and Write

Read and write numbers to at least 100,000 and determine the value of each digit.

624,104



Seven hundred and
twenty-three thousand, six
hundred and thirteen

Solve Problems

Solve number and practical problems that involve all of the other objectives.

Which 2 numbers can be multiplied to equal one thousand?

5 50 20 200

A pond is frozen so has ice on top but water underneath. The temperature at the bottom of the pond is 4°C. The temperature of the air above the ice is -2°C? What is the difference in temperature?

Answers

Counting

-2

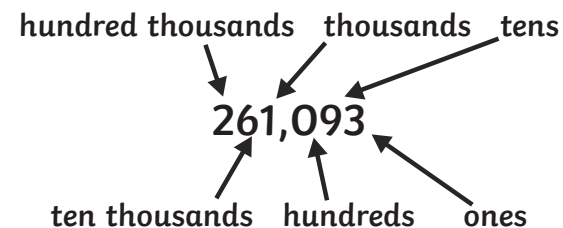
-3, -2, -1, 0, 1, 2, 3...

Place Value

hundred thousands thousands tens

261,093

ten thousands hundreds ones



Answers

Compare and Order

 $151,515 > 151,155$

27,277	722,727	722,772	727,272
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Rounding

Rounding 67,286 to the nearest ten thousand would mean using the number of thousands (7) and this is greater than or equal to 5, so it is rounded up to the next ten thousand (70,000) so it is rounded to 70,000.

60

Answers

Read and Write

Six hundred and twenty-four thousand, one hundred and four**723,613**

Solve Problems

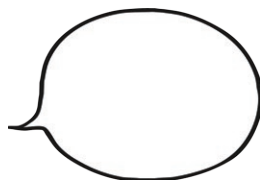
 5×200 or 50×20

6°C

Counting

Use negative numbers in context, and calculate intervals across zero.

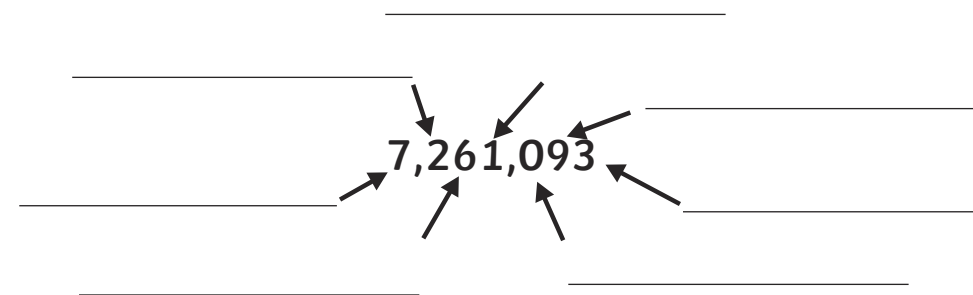
What number is twelve less than seven?



Explain why $-12 + 7$ is -5 and not -19 .

Place Value

Read, write, order and compare numbers to at least 10,000,000 and determine the value of each digit.



Compare and Order

Order and compare numbers to at least 10,000,000 and determine the value of each digit. Write $<$, $>$ or $=$

5,151,515 5,151,155

Order the following:

2,722,727, 277,277, 2,727,272, 2,722,772

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smallest

greatest

Rounding

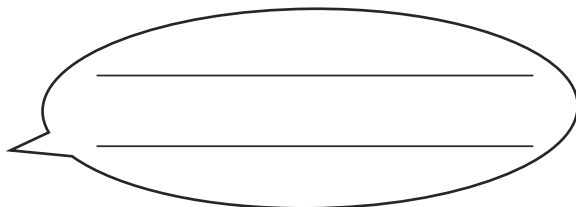
Explain why 567,286 could be rounded to 570,000.

Round 425 to the nearest 50.

Read and Write

Read and write numbers to at least 10,000,000 and determine the value of each digit.

1,214,621



two million, eight
hundred and thirty
thousand and twenty

Solve Problems

Solve number and practical problems that involve all of the other objectives.

Which 2 numbers can be multiplied to equal one hundred thousand?

50 500 2000 20,000

The temperature at the bottom of a mountain is 9°C , but at the top it is -13°C . What is the difference between the temperature at the top and bottom of the mountain?

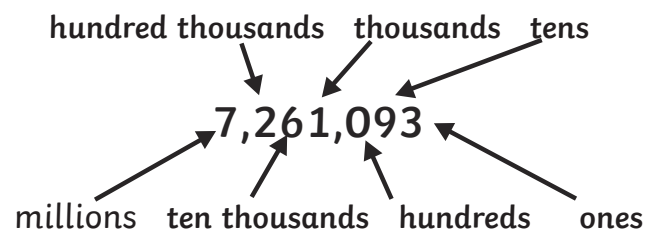
Answers

Counting

-5

Because starting at -12 and adding 7 will mean counting towards 0, so -11, -10, -9 etc. If the answer were -19 then the counting would go -13, -14, but this is subtracting not adding.

Place Value

**Answers**

Compare and Order

 $5,151,515 > 5,151,155$

277,277	2,722,727	2,722,772	2,727,272
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Rounding

Rounding 567,286 to the nearest ten thousand would mean using the number of thousands (7) and this is greater than or equal to 5, so it is rounded up to the next ten thousand (70,000) so it is rounded to 570,000.

450**Answers**

Read and Write

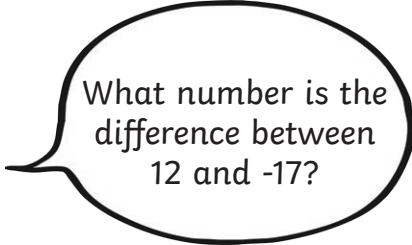
One million, two hundred and fourteen thousand, six hundred and twenty-one

2,830,020

Solve Problems

50 and 2000**22°C****Counting**

Use negative numbers in context, and calculate intervals across zero.



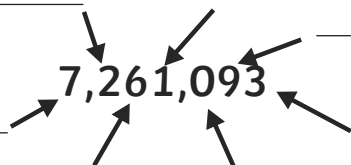
What number is the difference between 12 and -17?

Explain why $-12 - 7$ is -19 and not -5 .

A man has £12 in cash and owes a friend £20. How much money has the man?

Place Value

Read, write, order and compare numbers to at least 10,000,000 and determine the value of each digit.



Compare and Order

Order and compare numbers to at least 10,000,000 and determine the value of each digit.

When comparing 5,151,515 and 5,151,155, what is the place value of the digit which will tell which is greater?

Explain the reasons you would use to order the following numbers:

2,722,727, 277,277, 2,727,272, 2,722,772

Rounding

Round any whole number to a required degree of accuracy.

Explain why 2,567,286 could be rounded to 2,600,000.

Round 3250 to the nearest 500.

The population of London is 8.674 million.

To what number would you round the population of London when writing about London, giving your reasons.

Read and Write

Read and write numbers to at least 10,000,000 and determine the value of each digit.

Write half of this number using words: 4,208,092

Write fifty five thousand more than this number in numerals.

Solve Problems

Solve number and practical problems that involve all of the other objectives.

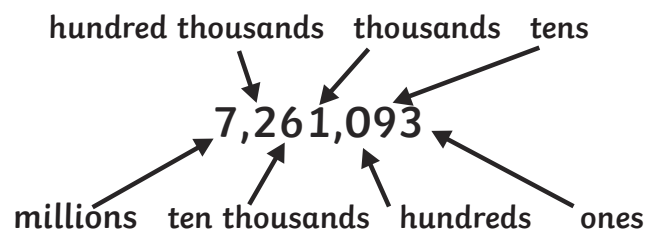
Which 2 numbers can be multiplied to equal twenty million?

500 5000 40,000 400,000

The temperature at the bottom of a mountain is 9°C, but at the top it is -13°C. Half way up the mountain the temperature is halfway between the temperatures at the top and bottom. What is the temperature half way up the mountain?

Answers

Place Value



Compare and Order

The hundreds digit (500)

Answers will vary depending on the methods children have used.

Answers

Counting

29degrees

Because starting at -12 and subtracting 7 will lead you away from 0, so -13, -14, etc If the answer were 5, then the counting would be going towards 0 so this would be adding and not subtracting.

-£8

Answers

Rounding

The number could be rounded to the nearest hundred thousand.

3500

Accept all suitable explanations.

Read and Write

Two million, one hundred and four thousand and forty-six.

2,159,046

Solve Problems

500 x 40,000

-2°C