

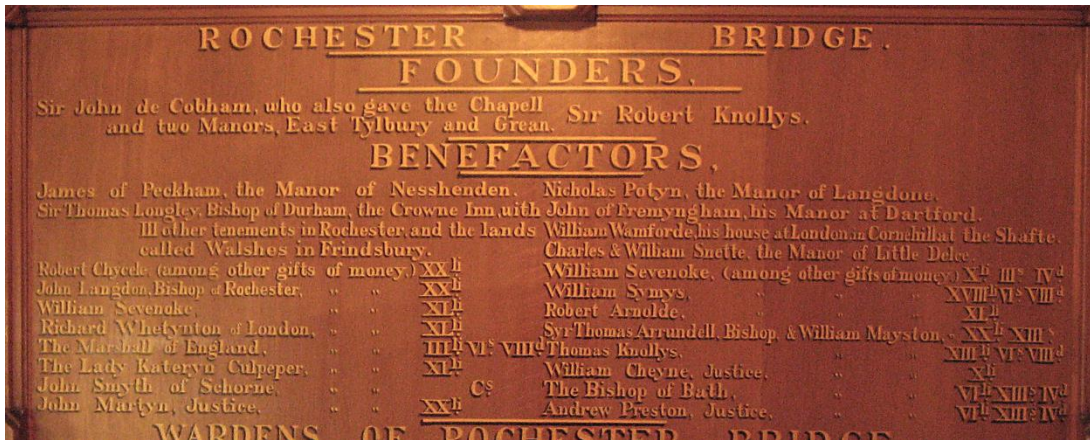
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Roman Numerals

The ancient Romans had their own method of writing numbers, and since the first bridge at Rochester was built by the Romans, it seems fitting that we challenge you to some Roman maths!

The Romans used certain symbols for certain numbers – it is thought that the I symbol comes from a stick or a rod used by ancient peoples to represent 1 of something. The fact that Romans group things in fives could come from the fact that we have 5 fingers on each hand.

Roman numerals still appear on many buildings and structures. Can you decode the symbols in this picture?



I	1
V	5
X	10
L	50
C	100
D	500
M	1000

Roman numerals have the bigger values on the left, and smaller ones on the right, a bit like ours. They then are added to get the final number. E.g. III = 1+1+1 = 3

However, sometimes they seem to be the other way around. Like here:

Or:



When a smaller number comes before a bigger number, you take away the smaller number from the larger one. So, IV means V(5) – I (1) = 4. Can you work out what XL means?

A general rule to remember is to make the Roman numerals in the shortest way possible: XC not LXXXX.

I can be used before V or X, X before L or C, C before D or M, but only once.

Can you shorten this numeral? MDCCCCX





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I	1
V	5
X	10
L	50
C	100
D	500
M	1000

Using the code, can you change the following numbers to Roman numerals?

- 1) Your age?
- 2) 17
- 3) A parent's (or whoever looks after you) age?
- 4) 43
- 5) 450
- 6) 960
- 7) 1381
- 8) 1399
- 9) 1914
- 10) Your year of birth?

Can you turn these Roman numerals into conventional numbers?

- 1) XI
- 2) XXIV
- 3) CLXVI
- 4) DLX
- 5) DCXLII
- 6) MDCCCXXIV
- 7) MDCCCLVI
- 8) MMDC
- 9) MCMLVII
- 10) MMXIX

Can you do some Roman numeral addition without converting them into decimal?

When adding Roman numerals, sometimes it is as easy as just writing down all of the symbols in the correct order (largest on the left, smallest on the right).

For example, CXI + VII = CXVIII

However, you have to take care that you don't end up with too many symbols. For example, VII + II = IX (not VIIII)

Try these:

- 1) LX + XI
- 2) CLXXII + XIII
- 3) CXXI + LXXVIII
- 4) DCLXV + CXII
- 5) DCCCLXVI + DCXI

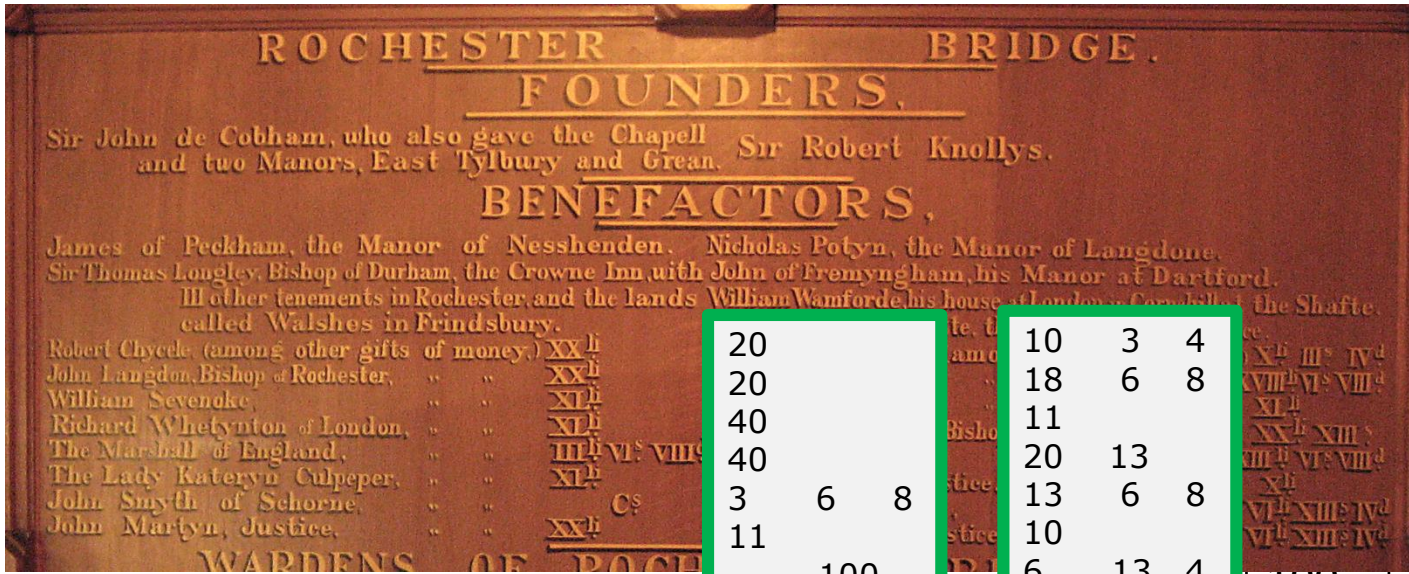




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Roman Numerals : Answers

Roman numerals still appear on many buildings and structures.
Can you decode the symbols in this picture?



	100
D	500
M	1000

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Or:



When a smaller number comes before a bigger number, you take away the smaller number from the larger one. So, IV means V(5) - I (1) = 4. Can you work out what XL means? **40**

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I can be used before V or X, X before L or C, C before D or M, but only once.

Can you shorten this numeral? MDCCCCX

MDCDX





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I	1
V	5
X	10
L	50
C	100
D	500
M	1000

Using the code, can you change the following numbers to Roman numerals?

- 1) Your age?
- 2) 17
- 3) A parent's (or whoever looks after you) age?
- 4) 43
- 5) 450
- 6) 960
- 7) 1381
- 8) 1399
- 9) 1914
- 10) Your year of birth?

- 1)
- 2) XVII
- 3)
- 4) XLIII
- 5) CDL
- 6) DCCLX
- 7) MCCCLXXXI
- 8) MCCCXCIX
- 9) MCMXIV
- 10)

Can you turn these Roman numerals into conventional numbers?

- 1) XI
- 2) XXIV
- 3) CLXVI
- 4) DLX
- 5) DCXLII

- 1) 11
- 2) 24
- 3) 166
- 4) 560
- 5) 642

- 6) MDCCCXXIV
- 7) MDCCCLVI
- 8) MMDC
- 9) MCMLVII
- 10) MMXIX

- 6) 1824
- 7) 1856
- 8) 166
- 9) 1957
- 5) 2019

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When adding Roman numerals, sometimes it is as easy as just writing down all of the symbols in the correct order (largest on the left, smallest on the right).

For example, CXI + VII = CXVIII

However, you have to take care that you don't end up with too many symbols. For example, VII + II = IX (not VIIII)

Try these:

- 1) LX + XI
- 2) CLXXII + XIII
- 3) CXXI + LXXVIII
- 4) DCLXV + CXII
- 5) DCCCLXVI + DCXI

- 1) LXXI
- 2) CLXXXV
- 3) CXCIX
- 4) DCCLXXVII
- 5) MCDLXXVII

