

Number and place value

Examples

1 Find the value of the following digits in the number 8017529

- a 1
- b 5
- c 2

Method:

Numbers are batched in “threes” starting from the right.

..., millions, thousands, units

so 8017529 is eight million, seventeen thousand, five hundred and twenty-nine.

Answers:

- a 1 is ten thousand = 10 000
- b 5 is five hundred = 500
- c 2 is twenty = 20

2 Place the following in **ascending** order:

XCII CXII CIX

Method:

Roman numerals are read from the left, looking for the highest value first.

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

If your number is one principal unit (any of those in bold) less than one of the units above, it is placed to the LEFT of that unit. For example, 90 would be made by placing **X** (10) before **C** (100), so **XC**, which means “10 less than 100”.

CM	CD	XC	XL	IX	IV
900	400	90	40	9	4

Otherwise the unit goes to the right, up to a maximum of 3 identical symbols at a time.

MMM	DCC	CC	LX	XXX	VIII
3000	700	200	60	30	8

Numbers are then built from the left to the right.

Answers:

$$XCII = XC + II = 90 + 2 = 92$$

$$CXII = C + X + II = 100 + 10 + 2 = 112$$

$$CIX = C + IX = 100 + 9 = 109$$

So the order is XCII, CIX, CXII.

A Answer these questions. You do not need to show your workings out.

1 Write two million, three hundred and seven thousand, five hundred and six in digits.

☐ [1]

2 What is the value of the seven in 7 012 008?

☐ [1]

3 Place the following in descending order:

a Two hundred thousand and seven

b 207 000

c 270 002

d Twenty seven thousand and twenty seven

☐ [1]

4 Write 469 in Roman numerals.

☐ [1]

5 Write DCCXCI in digits.

☐ [1]

6 Write four more than DCCXCI in Roman numerals.

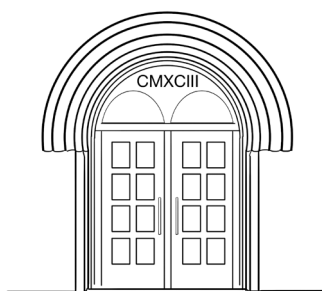
☐ [1]

7 What is three less than MXXII in Roman numerals?

☐ [1]

Ⓑ Answer these questions and show your workings out.

1



Write the year written above the doorway in digits.

[illegible]

 [1]

2 The speed of light is 299 792 458 metres per second.
What are the values of the seven and the four in words?

Seven represents _____

Four represents _____

 [2]

[illegible]

3 Which of the following numbers is the smallest and which is the largest?

CMXXXIII	1001	MCX	941
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[illegible]

A diagram showing a square with a side length of 2 and a rectangle with a width of 5.

Unit 7

- 4 Write the value of the following sum in words:
1 010 100 minus one hundred and one thousand and ten.

[illegible]

 [1]

- © Answer these questions. You do not need to show your workings out.

- 1** Write nine million, seventy thousand and six in digits.

 [1]

- 2** What is the value of the nine in 7 090 062 in words?

 [1]

- 3** Place the following in ascending order:

- a** Two million, eight thousand and thirty-nine
b 2008309
c 2080030
d two hundred and eighty thousand, three hundred and ninety

 [1]

- 4** Write 949 in Roman numerals.

 [1]

- 5** Write MMXLIX in digits.

 [1]

- 6** Write four more than CMXCVII in Roman numerals.

 [1]

- 7** What is three less than MII in Roman numerals?

 [1]

Unit 7

A

- 1 2307506
- 2 7000000
- 3 **c, b, a, d**
- 4 CDLXIX
- 5 $500 + 100 + 100 + 90 + 1 = 791$
- 6 $CCXC + I + 4 = DCCXC + V = DCCXCV$
- 7 $1022 - 3 = 1019 = M + X + IX = MXIX$

B

- 1 $CMXCIII = CM + XC + III = 900 + 90 + 3 = 993$
- 2 seven hundred thousand, four hundred
- 3 smallest = $CMXXXIII = 933$; largest = $MCX = 1110$
- 4 $1010100 - 101010 = 909090 = \text{nine hundred and nine thousand and ninety}$

C

- 1 9070006
- 2 ninety thousand
- 3 **d, a, b, c**
- 4 CMXLIX
- 5 2049
- 6 $997 + 4 = 1,001 = MI$
- 7 $1002 - 3 = 999 = CMXCIX$