

A QUICK HISTORY OF MATHS

NUMBERS THROUGH THE AGES

Can you work out what numbers are missing in the sums and sequences below? Use the **KEY** to help you.

Try writing your answers using the same symbols as the **BABYLONIANS**, **EGYPTIANS**, or **ROMANS**.

COUNT LIKE A... BABYLONIAN









- $< + \vee =$ _____
- $<<\vee - \vee\vee\vee =$ _____
- $< \times \vee\vee\vee\vee =$ _____

KEY

The **BABYLONIANS** used a vertical wedge symbol for the number one, and a horizontal wedge for ten. So:

$$\begin{aligned} \vee &= 1 & < &= 10 \\ \vee\vee\vee &= 4 & <\vee\vee &= 12 \\ <<\vee\vee &= 23 & <<<<\vee\vee\vee\vee &= 45 \end{aligned}$$

COUNT LIKE AN... EGYPTIAN

-  \div  = _____
-  +  +  +  = _____
-  \times  = _____

The **EGYPTIANS** used small pictures called hieroglyphs for their words and numbers:

$$\begin{aligned} | &= 1 & \text{brown staff} &= 1,000 \\ \cap &= 10 & \text{pink lotus} &= 10,000 \\ \text{purple spiral} &= 100 & \text{blue frog} &= 100,000 \end{aligned}$$

COUNT LIKE A... ROMAN

- $II + VIII =$ _____
- $II, IV, \text{____}, VIII, X$
- $C - XXX =$ _____

The **ROMANS** used letters instead of numbers. When a letter is placed before another that has a higher value, the smaller figure is taken away:

I	II	III	IV	V	VI	VII	VIII	IX
1	2	3	4	5	6	7	8	9
X	XX	XXV	L	LXXV	XC	XCIX	C	
10	20	25	50	75	90	99	100	

MAGIC SQUARE

The ancient **CHINESE** came up with a fun mathematical invention, the **MAGIC SQUARE**.

Each row, column and diagonal in the square all add up to the same total – this is known as the **MAGIC CONSTANT**.

Work out the **MAGIC CONSTANT** of the square opposite. Then fill the gaps with the right numbers. Turn the page for all the answers!

13	8	15
9		11

MAGIC CONSTANT
= _____

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ANSWERS!

Check your answers here. How did you do?

COUNT LIKE A... BABYLONIAN

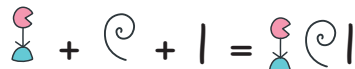



1. $\langle + \vee = \langle \vee$ (10 + 1 = 11)

2. $\langle \langle \vee - \vee \vee \vee = \langle \vee \vee \vee \vee \vee \vee \vee \vee$ (21 - 3 = 18)

3. $\langle \times \vee \vee \vee \vee = \langle \langle \langle \langle$ (10 × 4 = 40)

COUNT LIKE AN... EGYPTIAN

1.  \div  =  (100,000 ÷ 1,000 = 100)

2.  $+$  $+$  =  (10,000 + 100 + 1 = 10,101)

3.  \times  =  (10 × 10 = 100)

COUNT LIKE A... ROMAN

1. $\text{II} + \text{VIII} = \text{X}$ (2 + 8 = 10)

2. $\text{II}, \text{IV}, \text{VI}, \text{VIII}, \text{X}$ (2, 4, 6, 8, 10 → increasing by 2)

3. $\text{C} - \text{XXX} = \text{LXX}$ (100 - 30 = 70)

MAGIC SQUARE

Rows:

13 + 8 + 15 = 36

14 + 12 + 10 = 36

9 + 16 + 11 = 36

Columns:

13 + 14 + 9 = 36

8 + 12 + 16 = 36

15 + 10 + 11 = 36

Diagonals:

13 + 12 + 11 = 36

15 + 12 + 9 = 36

13	8	15
14	12	10
9	16	11

MAGIC CONSTANT

= 36