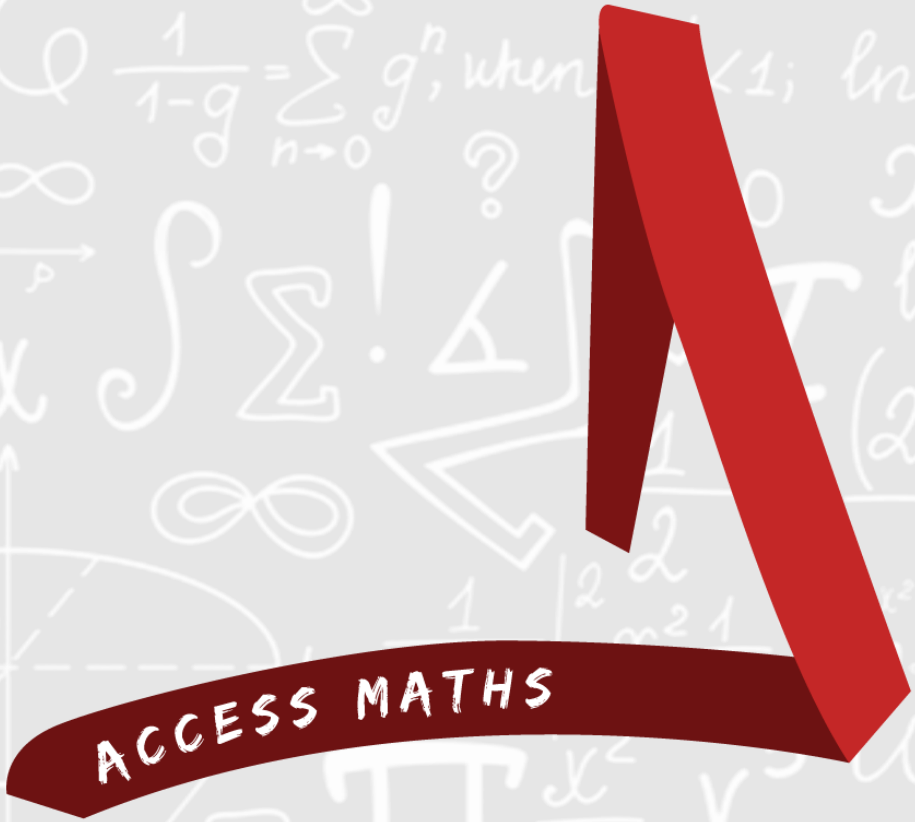


NUMERACY CHALLENGE



LEVEL 1



LEVEL 2

NUMERACY CHALLENGE

4

The word *four* has four letters. In the English language there is no other number whose number of letters is equal to its value.

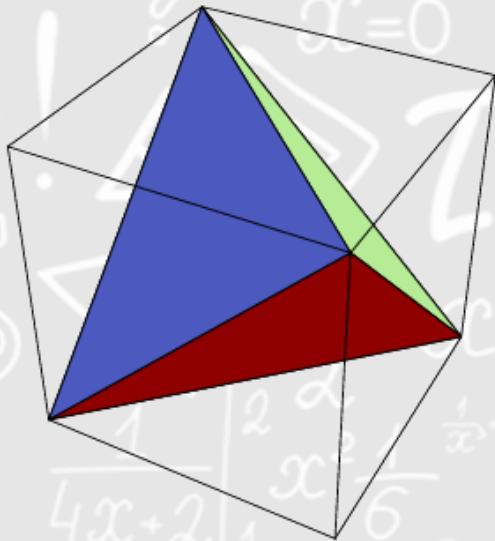
Use exactly four 4's to form every integer (whole number) from 0 to 12, using only the operators:

+, -, \times , \div ,
() (brackets)
 x^2 (square)

For example, $0 = 44 - 44$

LEVEL 1

NUMERACY CHALLENGE



A tetrahedron is a kind of pyramid with four equilateral triangular faces. It also has four corners.

Using four 4's, and the operators $+$, $-$, \times , \div , $()$ (brackets) x^2 (square), $\sqrt{\quad}$ (Square root) and $!$ (factorial), how many of the numbers from 1-50 can you make?

You have to use all four of the 4's in each sum...

Eg: $(4 \div 4) \times (4^2 \div 4)$ would make 4

NUMERACY CHALLENGE LEVEL 1

Use exactly four 4's to form
every
integer (whole number) from 0
to 12, using only the operators:

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For example, $0 = 44-44$

NUMERACY CHALLENGE LEVEL 1

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 x^2 (square)

For example, $0 = 44-44$

NUMERACY CHALLENGE LEVEL 2

Using four 4's, and the operators +, -, \times , \div , () (brackets) x^2 (square), $\sqrt{\quad}$ (Square root) and ! (factorial), how many of the numbers from 1-50 can you make?

You have to use all four of the 4's in each sum...

Eg: $(4 \div 4) \times (4^2 \div 4)$ would make 4

NUMERACY CHALLENGE LEVEL 2

Using four 4's, and the operators +, -, \times , \div , () (brackets) x^2 (square), $\sqrt{\quad}$ (Square root) and ! (factorial), how many of the numbers from 1-50 can you make?

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Possible Solutions

$$0 = 44-44$$

$$1 = 44/44 \text{ or } (4+4)/(4+4) \text{ or } (4/4) / (4/4) \text{ or } [(4! - 4)/ 4] - 4$$

$$2 = 4/4+4/4$$

$$3 = (4+4+4)/4$$

$$4 = 4*(4-4)+4$$

$$5 = (4*4+4)/4$$

$$6 = 4*.4+4.4$$

$$7 = 44/4-4$$

$$8 = 4+4.4-.4$$

$$9 = 4/4+4+4$$

$$10 = 44/4.4$$

$$11 = 4/.4+4/4$$

$$12 = (44+4)/4$$

$$13 = 4!-44/4$$

$$14 = 4*(4-.4)-.4$$

$$15 = 44/4+4$$

$$16 = .4*(44-4)$$

$$17 = 4/4+4*4$$

$$18 = 44*.4+.4$$

$$19 = 4!-4-4/4$$

$$20 = 4*(4/4+4)$$

$$21 = (4.4+4)/.4$$

$$22 = 44*\text{sqrt}(4)/4$$

$$23 = (4*4!-4)/4$$

$$24 = 4*4+4+4$$

$$25 = (4*4!+4)/4$$

$$26 = 4/.4+4*4$$

$$27 = 4-4/4+4!$$

$$28 = 44-4*4$$

$$29 = 4/.4/.4+4$$

$$30 = (4+4+4)/.4$$

$$31 = (4!+4)/4+4!$$

$$32 = 4*4+4*4$$

$$33 = (4-.4)/.4+4!$$

$$34 = 44-4/.4$$

$$35 = 44/4+4!$$

$$36 = 44-4-4$$

$$37 = (\text{sqrt}(4)+4!)/\text{sqrt}(4)+4!$$

$$38 = 44-4!/4$$

$$39 = (4*4-.4)/.4$$

$$40 = 44-\text{sqrt}(4*4)$$

$$41 = (\text{sqrt}(4)+4!)/.4-4!$$

$$42 = \text{sqrt}(4)+44-4$$

$$43 = 44-4/4$$

$$44 = 44.4-.4$$

$$45 = 4/4+44$$

$$46 = 44-\text{sqrt}(4)+4$$

$$47 = 4!+4!-4/4$$

$$48 = 4*(4+4+4)$$

$$49 = (4!-4.4)/.4$$

$$50 = 4!/4+44$$

