

WHO AM I?

How quickly can you find me?



I am a whole number less than 1000.

The product of my digits is 225.

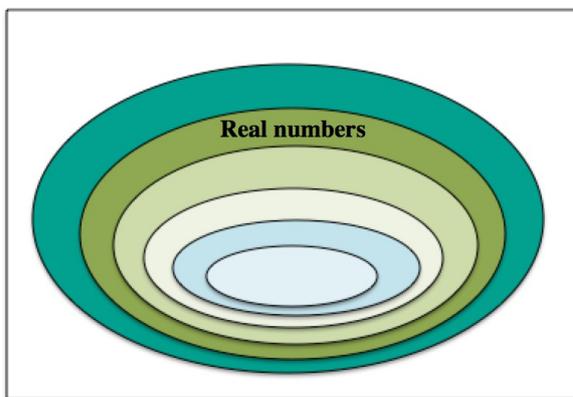
I am not a multiple of 5.

Am I a multiple of 13?

Am I real? Am I rational? Am I irrational?

Now divide me by 11. Is the answer real? Is it rational?

Now multiply me by pi. Is the answer real? Is it rational?



Copy this Venn diagram and label the following sets of numbers:

Integers, Natural numbers, Rational numbers, Whole numbers, Complex numbers, All numbers.

HELP

Try this first. Cross out the numbers in the squares that do not fit the clues.

Now start the problem above. Find the factors of 225 and use the clues to find the number.

www.nrich.maths.org/content/id/7212/NRICH-poster_OneThirtySix.pdf

Can you find the chosen number from this square using the clues below?

1. The number is odd
2. It is a multiple of three
3. It is smaller than 7×4
4. Its tens digit is even
5. It is the greater of the two possibilities

| | | | | | |
|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 |

NEXT

Make up a similar number puzzle. Perhaps work with a partner and solve each other's puzzles.