

## Two Two's are Four

Each of the different letters below stands for a different number.

$$\begin{array}{r} + \text{TWO} \\ \text{TWO} \\ \hline \text{FOUR} \\ \hline \end{array}$$

What number could each letter stand for?

Can you find more than one solution?

Think you've cracked it?

Email me and show me what you've worked out

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## Lost Marbles

You have three bags, each containing two marbles.

Bag A contains two white marbles

Bag B contains two black marbles

Bag C contains one white marble and one black marble.

You pick a random bag and take out one marble. It is a white marble.

What is the probability that the remaining marble from the same bag is also white?



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## The Trouble with Marriage

John is looking only at Jane, Jane is looking only at Rick. John cannot see Rick.  
John is married, Rick is not married.

Is a married person looking at a non-married person?

The answer is either:

Yes

No

More information is required.

A reason is required for your answer in order for it to be valid.

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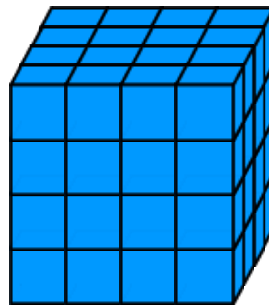
## Cubes of Blue

A solid, four cm cube of wood is coated with blue paint on all six sides.

Then the cube is cut into smaller one cm cubes.

These new one cm cubes will have either three blue sides, two blue sides, one blue side, or no blue sides.

How many of each will there be?



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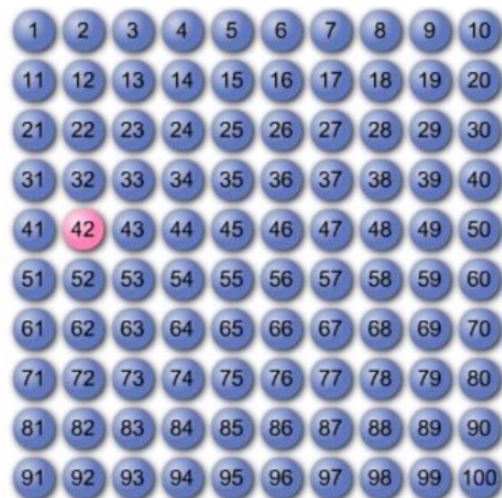
# Life, the Universe, and Everything

Starting from 42 and only:

- Multiplying by 2 (x2)
- Subtracting 5 (-5)

How many different numbers from 1 to 100 can you reach?

You can multiply and subtract as many times as you like and in any order.



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