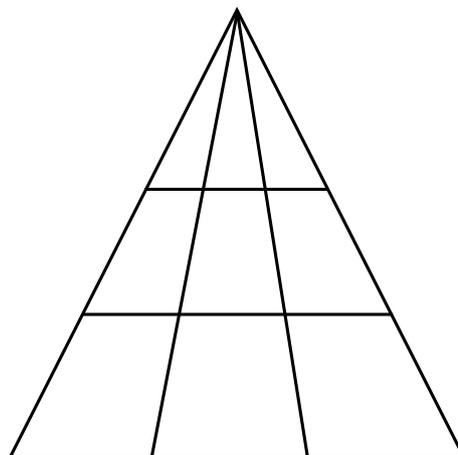


Extra puzzles and riddles for 5 May

A How many triangles can you count in the figure at the right?

B Imagine that you had a rope that was passed around the circumference of the Earth, stretched tightly over it, up hill and down dale, touching the surface everywhere. This rope would be about 25 000 miles long.

Now imagine that you cut the rope and splice an extra 6 feet length to it.

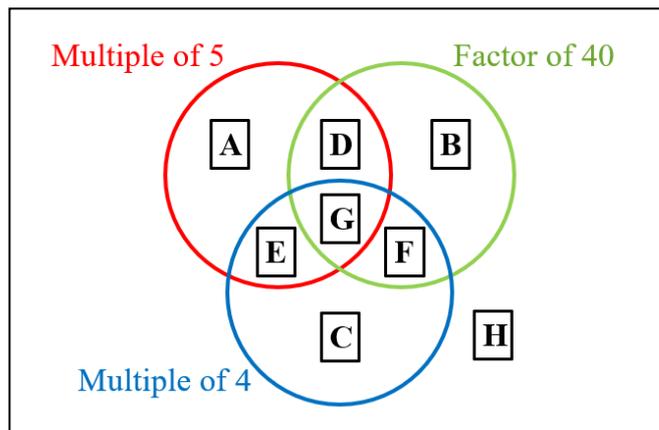


If you were able to raise this rope up at an equal distance from the surface everywhere, how much above the surface would it be?

C If your neighbour's peacock lays an egg in your garden, under the law that applies in England and Wales, are you allowed to keep the egg?

D The image here contains a Venn diagram. Each circle contains only those whole numbers that satisfy the stated property, and every number that satisfies that property.

For example the red circle contains only numbers that are a multiple of 5, but also every number that is a multiple of 5 (that is an infinite number of them!)



The green circle contains all the factors of 40, that is all the whole numbers that divide into 40 exactly with no remainder.

Can you give an example of numbers that are in the eight regions marked A to H?

There are many possible answers in some regions. Note that in those regions that are inside 2 or more circles the number must satisfy the requirements of each circle. (This is not as difficult as it may sound at first.)

E If an aeroplane crashes exactly on the French-Swiss border, in which country should the survivors be buried?

F Some people have been asking for more number puzzles, so here is one at the right, quite an easy one.

What number should replace the question mark?

An answer may immediately suggest itself, but why would that be right? What property does the completed figure have?

