1 How many pets live in my house if it's known that:

A: All of them but two are dogs.

B: All of them but two are cats.

C: All of them but two are parrots.

Can you determine the number of pets in the above problem and what they are? **NO, why?**

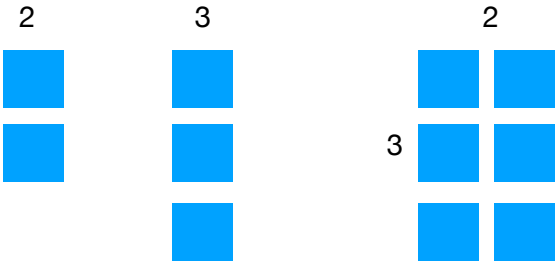
What if I add "There are dogs, cats, and parrots in the house"?

2 Two people have two square cakes. Each person makes two straight cuts all the way through the cake. However, one person ends up with 3 pieces, but the other has 4. How?

3 Without lifting up the pencil, connect the 4 dots below using line segments.

Do it again but start and end at the same point.

4 For multiplication, one way to think of it is as two sides of a rectangle. For example, 2 x 3 = 6 is shown here:



If you add up the number of squares, you'll get 6, which is the same as 2 x 3.

Try it yourself with 3x4 (should equal 12)

Try it with 2x5. What does this equal?

5 Now we're going to try and find a pattern between even and odd numbers that are multiplied.

When you multiple an even number by an even number, is the output even or odd? Find for each of the below.

EVEN x EVEN =
Try 2 x 4

EVEN x ODD =
Try 2 x 5

ODD x EVEN =
Try 3 x 4

ODD x ODD =
Try 3 x 5

Is this true for all numbers? Try to show using the block method.