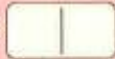





Challenge

Look at a set of dominoes with the double blank removed, that is:



Count the total number of dots on each domino.  $3 + 6 = 9$

What fraction of the dominoes have totals that are an even number?

What fraction of the dominoes have totals that are an odd number?

What is the ratio of even totals to odd totals?

You will need:

- set of 6×6 dominoes

Think about ...


Be systematic in the way you record the totals, differences and products.



What if?

Look at a set of dominoes with the doubles removed, that is:



What if you find the difference between the number of dots on each side?  $6 - 3 = 3$

What fraction of the dominoes have differences that are an even number?


What fraction of the dominoes have differences that are an odd number?

What is the ratio of even differences to odd differences?

Look at a set of dominoes with the dominoes with a blank removed, that is:



What if you multiply together the number of dots on each side?

 $3 \times 6 = 18$

What fraction of the dominoes have products that are an even number?

What fraction of the dominoes have products that are an odd number?

What is the ratio of even products to odd products?

When completed, consider:

Could you have calculated the answers in a different way?

Was your method the most efficient?