**Odd and Even Numbers Investigation**

What if we multiply two odd numbers together, is the answer odd too? Will the number always be odd or always be even or does it change?

I predict that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Examples:

$7×3$ = \_\_\_\_\_

$9×5$ = \_\_\_\_\_

\_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

I found out that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What if we multiply an odd number by an even number? Will the number always be odd or always be even or does it change? What about even x odd?

I predict that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Examples:

$7×4$ = \_\_\_\_\_

$3×8$ = \_\_\_\_\_

\_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

I found out that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Extension questions**

What happens if I subtract an even number from another even number? Is the answer an even number too? Does this always stay the same?

What about if we subtract two odd numbers from each other, will the answer be odd too?

Does the rule stay the same no matter what the odd number?

What about if we add or subtract 3 even numbers in a row, will the answer stay even?