

Summer Week 3 - Maths Lesson 4

Can I use the SMILE method to multiply?

Fast five (answers on next page)

$$1) 5716 - 2605 =$$

$$2) 8145 + 2798 =$$

$$3) 6714 - 4768 =$$

$$4) 23 \times 4 =$$

$$5) 54 \times 3 =$$

Fast five **answers**

$$1) 5716 - 2605 = 3111$$

$$2) 8145 + 2798 = 10943$$

$$3) 6714 - 4768 = 1946$$

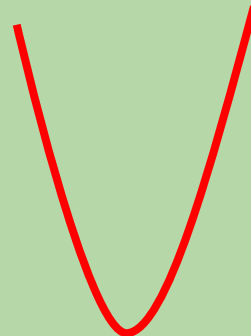
$$4) 23 \times 4 = 92$$

$$5) 54 \times 3 = 162$$

Today we are going to use the SMILE method for multiplication to help us multiply larger numbers.



When using the smile method we only look at the digits greater than 0. This makes it easier for us to multiply the larger numbers.

$$\begin{array}{r} \underline{80} \times \underline{2} = \end{array} \quad \begin{array}{r} \text{orange arrow} \\ \rightarrow \end{array} \quad \begin{array}{r} 8 \times 2 = 16 \end{array}$$




We multiply together the smaller numbers and then remember to add on the same number of 0's in the question to the answer.

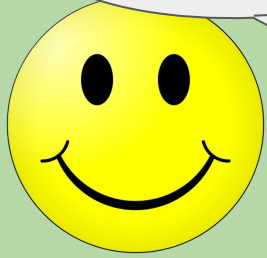
$$\underline{80} \times \underline{2} = 160$$



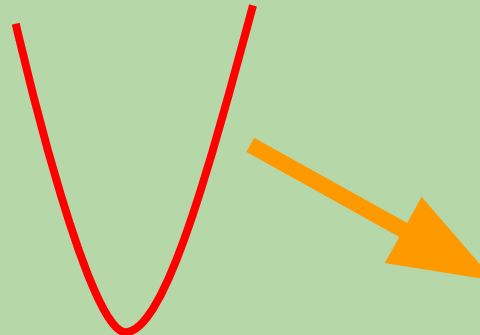

$$8 \times 2 = 16$$

Because 80 is 10x bigger than 8 (which is what we multiplied by 2) we therefore need to make the answer 10x bigger.

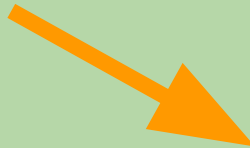
Because there are two 0s in the question, we put two 0s on the answer. This is so the answer is the same size as the numbers being multiplied.



$$\underline{50} \times \underline{30} = 1500$$



$$5 \times 3 = 15$$



Let's try another one...

$$\underline{600} \times \underline{40} =$$


$$6 \times 4 = 24$$



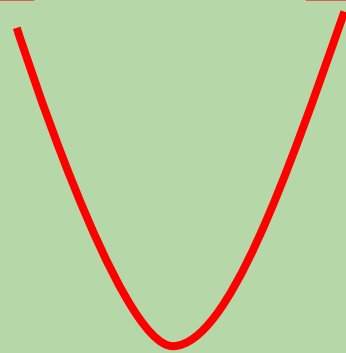
Because there are three
0s in the question, we put
three 0s on the answer.

$$\underline{6}00 \times \underline{4}0 = 24000$$

$6 \times 4 = 24$



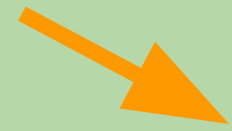
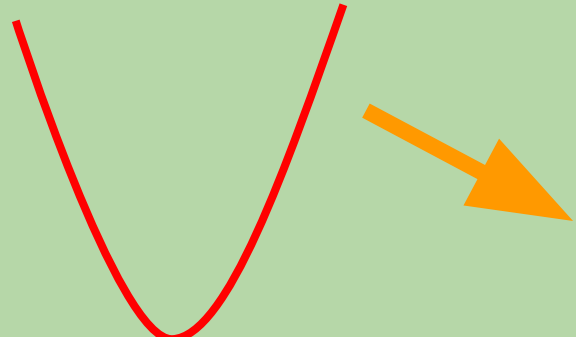
Your turn to have a go! The answer is on the next slide.

$$\underline{800} \times \underline{30} =$$




We forget the 0s and multiply the other digits and then at the end, because there are three 0s in the question, we put three 0s on the answer.

$$\underline{800} \times \underline{30} = 24000$$


$$8 \times 3 = 24$$



Your activities:

Choose 1 challenge to do today.

Red - multiplying multiples of 10 by 2, 5, 3 and 4 using the smile method.

Yellow - Multiplying multiples of 10 and 100 by multiples of 10 and 100 using the smile method.

Green - Multiplying multiples of 10, 100 and 1000 by multiples of 10, 100 and 1000 using the smile method.