



Investigate 1 Can you see patterns when multiplying by 10's and 100's?

- Use your calculator or head to do each sum.
- Talk about any patterns you see in your group.

$$3 \times 4 = \dots\dots\dots$$

$$3 \times 40 = \dots\dots\dots$$

$$3 \times 400 = \dots\dots\dots$$

$$3 \times 5 = \dots\dots\dots$$

$$3 \times 50 = \dots\dots\dots$$

$$3 \times 500 = \dots\dots\dots$$

$$3 \times 6 = \dots\dots\dots$$

$$3 \times 60 = \dots\dots\dots$$

$$3 \times 600 = \dots\dots\dots$$

Can you answer each of these sums without using a calculator?

$$3 \times 7 = \dots\dots\dots$$

$$3 \times 70 = \dots\dots\dots$$

$$3 \times 700 = \dots\dots\dots$$

$$4 \times 5 = \dots\dots\dots$$

$$4 \times 50 = \dots\dots\dots$$

$$4 \times 500 = \dots\dots\dots$$

$$5 \times 6 = \dots\dots\dots$$

$$5 \times 60 = \dots\dots\dots$$

$$5 \times 600 = \dots\dots\dots$$

$$500 \times 5 = \dots\dots\dots$$

$$900 \times 4 = \dots\dots\dots$$

$$700 \times 4 = \dots\dots\dots$$

$$600 \times 7 = \dots\dots\dots$$

$$400 \times 3 = \dots\dots\dots$$

$$600 \times 6 = \dots\dots\dots$$

$$4 \times 600 = \dots\dots\dots$$

$$2 \times 400 = \dots\dots\dots$$

$$8 \times 400 = \dots\dots\dots$$

$$6 \times 500 = \dots\dots\dots$$

$$4 \times 200 = \dots\dots\dots$$

$$4 \times 900 = \dots\dots\dots$$

$$200 \times 6 = \dots\dots\dots$$

$$8 \times 700 = \dots\dots\dots$$

$$6 \times 600 = \dots\dots\dots$$

$$900 \times 2 = \dots\dots\dots$$

$$700 \times 7 = \dots\dots\dots$$

$$800 \times 8 = \dots\dots\dots$$

Investigate 2 When you multiply any whole number by a thousand the number will always end in three zeros.

Is this statement true or false.