



# Multiplying 2-Digit by 1-Digit Numbers

## Understand it!

To find a product like  $26 \times 3$ , multiply the parts.

**What is a written way to record multiplication?**

How many T-shirts with the saying *and your point is...* are in 3 boxes?

**Choose an Operation** Multiply to repeat equal quantities.

Saying on T-shirt	Number of T-shirts per box
<i>Trust Me</i>	30 T-shirts
<i>and your point is...</i>	26 T-shirts
<i>I'm the princess that's why</i>	24 T-shirts
<i>because I said so</i>	12 T-shirts

## One Way

Remember, one way to multiply is to multiply the parts.

$$\begin{array}{r}
 26 \\
 \times 3 \\
 \hline
 18 \\
 + 60 \\
 \hline
 78
 \end{array}
 \quad \text{OR} \quad (20 \times 3) + (6 \times 3) = 60 + 18 = 78$$

Parts

A shortcut for multiplying the parts is shown at the right.

## Another Way

**Step 1**  
Multiply the ones. Regroup if necessary.

$$\begin{array}{r}
 1 \\
 26 \\
 \times 3 \\
 \hline
 8
 \end{array}$$

**Step 2**  
Multiply the tens. Add any extra tens.

$$\begin{array}{r}
 1 \\
 26 \\
 \times 3 \\
 \hline
 78
 \end{array}$$

There are 78 T-shirts in 3 boxes.

## Another Example

How do I record multiplication for larger products?

Mrs McAdam ordered 8 boxes of T-shirts with the saying *I'm the princess, that's why*. How many of the T-shirts did she order?

### Choose an Operation

Since you are repeating equal quantities, 8 groups of 24, you will multiply. Find  $8 \times 24$ .

#### Step 1

Multiply the tens.  $(8 \times 20) + (8 \times 4) = 160 + (8 \times 4)$

#### Step 2

Multiply the ones.  $(8 \times 20) + (8 \times 4) = 160 + 32$

Mrs McAdam ordered 192 T-shirts.