MULTIPLY AND DIVIDE 2 & 3 DIGITS BY 1 DIGIT



Unit Overview

In this unit, you examine the multiplication of two and three digit numbers times a single digit number. You will then look at division. First, you will divide two digit numbers by a single digit and then you will divide three digit numbers by a single digit.

Whole Number Multiplication



Line up the numbers from right to left.

Multiply the Ones



1	
342	12 ones, 6×2 , makes 1 ten
~ 6	and 2 ones.
<u>^ U</u>	Carry the 1
2	

Multiply the Tens

2	
342	25 tens, $6 \times 4 + 1$, or 250,
× 6	makes 2 hundreds and 5 tens.
52	Carry the 2.

Multiply the Hundreds

342	20 hundreds, $6 \times 3 + 2$, or
× 6 2,052	2000, makes 2 thousand and
	0 hundreds.
	Carry the 2.

Answer: $342 \times 6 = 2,052$

Click on the link to watch the video "Multiplying: 2 digits by 1 digit".



Click on the link to watch the video "Multiplying: 3 digits by 1 digit".



Click on the link to watch the video "<u>Multiplying: 2 digits by 1 digit</u> (with carrying)".



Click on the link to watch the video "<u>Multiplying: 3 digits by 1 digit</u> (with carrying)".



Whole Number Division - Two Digits Divided by One Digit



 $12 \div 2 = 6$ or $2 \times 6 = 12$ Write the 12 under the dividend and then subtract. If you have a 0, there is no remainder. You will do remainders in another unit.

The **dividend** is the number to be divided. The **divisor** is the number that divides. The **quotient** is the answer.

Click on the link to watch the video "<u>Dividing numbers: intro to long</u> <u>division</u>".



Whole Number Division - Three Digits Divided by One Digit

The dividend will now have **3** digits.

Example:

 $\begin{array}{r}
67\\
2)\overline{134}\\
\underline{12} \\
14\\
-\underline{14}\\
0\end{array}$



How many set of 2 will go into 1? NONE! Since the first number can't be divided into, use the first two numbers. How many sets of 2 will go into 13? 6 sets of 2 equals 12. Place the 12 under the 13 and subtract.



There is another number in the divided; the 4. Look at the arrow. Move the 4 down beside the 1. Now there is a 14.



Divide again. How many sets of 2 will go into 14? 7 sets of 2 equals 14. Place the 14 under the 14 and subtract.



14 - 14 = 0. When all the numbers in the dividend are used and there is a 0, the dividing is finished. There is no remainder and the quotient is 7.

Click on the link to watch the video "<u>Dividing numbers: long division</u> <u>example</u> ".

