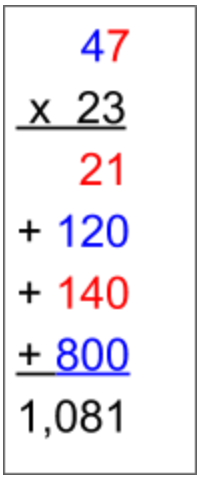
**Unit 3: Multiplication of Whole Numbers**

**Chapter 7: Multiply up to 5-digit numbers by a 2-digit number**




Step 1: Multiply in the ones place

7 x 3 = 21

Record the partial product below

Step 2: Multiply in the tens place

4 tens = 40 40 x 3 = 120

Record the partial product below

Step 3: Multiply with the second digit times the ones place

2 tens = 20 20 x 7 = 140

Step 4: Multiply with the second digit times the tens place

2 tens = 20 4 tens = 40 20 x 40 = 800

Step 5: Add the partial products to find the total product


Step 1: Multiply in the ones place

2 x 5 = 10

Record the partial product below

Step 2: Multiply in the tens place

7 tens = 70 70 x 5 = 350

Record the partial product below

Step 3: Multiply in the hundreds place

3 hundreds = 300 300 x 5 = 1,500

Step 4-6: Repeat the multiplication steps using the digit in the tens place of the second factor

30 x 2 = 60

30 x 70 = 2100

30 x 300 = 9000

Step 7: Add the partial products

```
   6816
x    44
-------
  24
+ 40
+ 3200
+ 24000
+ 240
+ 400
+ 32000
+240000
-------
 299,904
```

Step 1: Multiply in the ones place

6 x 4 = 24

Step 2: Multiply in the tens place

1 ten = 10  10 x 4 = 40

Step 3: Multiply in the hundreds place

8 hundreds = 800  800 x 4 = 3,200

Step 4: Multiply in the thousands place

6 thousands = 6,000  6,000 x 4 = 24,000

Step 5-8: Repeat the multiplication steps using the digit in the tens place of the second factor

40 x 6 = 240

40 x 10 = 400

40 x 800 = 32,000

40 x 6000 = 240,000

Step 9: Add the partial products

```
  25329
x    26
-------
  54
+ 120
+ 1800
+ 30,000
+ 120,000
+ 180
+ 400
+ 6,000
+ 100,000
+ 400,000
-------
 658,554
```

Step 1: Multiply in the ones place

9 x 6 = 54

Record the partial product below

Step 2: Multiply in the tens place

2 tens = 20  20 x 6 = 120

Record the partial product below

Step 3: Multiply in the hundreds place

3 hundreds = 300  300 x 6 = 1,800

Step 4: Multiply in the thousands place

5 thousands = 5,000  5,000 x 6 = 30,000

Step 5: Multiply in the ten-thousands place

2 ten thousands = 20,000  20,000 x 6 = 120,000

Step 6-10: Repeat the multiplication steps with the digit in the tens place of the second factor

9 x 20 = 180

20 x 20 = 400

300 x 20 = 6,000

5,000 x 20 = 100,000

20,000 x 20 = 400,000

Step 11: Add the partial products

$2.83
x 65
15
+ 400
+ 1000
+ 180
+ 4800
+ 12000
18395
$183.95

Step 1: Multiply in the ones place

3 x 5 = 15

Record the partial product below

Step 2: Multiply in the tens place

8 tens = 80 80 x 5 = 400

Record the partial product below

Step 3: Multiply in the hundreds place

3 hundreds = 300 300 x 5 = 1,500

Step 4-6: Repeat the steps of multiplication with the digit in the tens place of the second factor

3 x 60 = 180

80 x 60 = 4,800

200 x 60 = 12,000

Step 7: Add the partial products to find the total product

Step 8: Add in the dollar sign and decimal point

Reminders:

- ★ Make sure to carefully line up all place values
- ★ Remember that where a digit is located matters (place value)
- ★ Keep track of the number of zeroes needed for each place value
- ★ Add partial products carefully
- ★ When multiplying with the second digit in the second factor, remember that it is in the tens place (keep track of zeros and multiples!)
- ★ When multiplying money amounts, the steps are the same, just add the decimal/dollar sign to the answer at the end