NS6-24: Multiplying – 3-Digit by 1-Digit #3

Dillon multiplies **2 × 213** in <u>three</u> different ways.

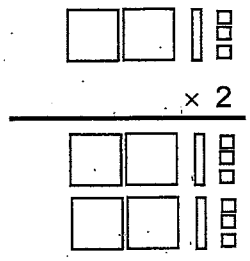
1. With a **chart**:

	hundreds	tens	ones
	2	1	3
×			2
	4	2	6

2. In **expanded form**:

200 + 10 + 3
× 2
= 400 + 20 + 6
= 426

3. With **base ten materials**:



---

1. Rewrite the multiplication statement in expanded notation. Then perform the multiplication.

a) 234
× 2

_____ + _____ + _____
× 2
= _____ + _____ + _____
= _____

b) 133
× 3

_____ + _____ + _____
× 3
= _____ + _____ + _____
= _____

2. Multiply.

a)

	4	1
×		4

b)

4	3	4
×		2

c)

3	1	2
×		3

d)

1	2	4
×		2

e)

3	2	3
×		3

3. Multiply by regrouping ones as tens.

a)

2	2	7
×		2

b)

2	1	6
×		4

c)

2	2	4
×		3

d)

4	3	6
×		2

e)

1	1	6
×		6

4. Multiply by regrouping tens as hundreds. In the last question, you will also regroup ones as tens.

a)

3	6	4
×		2

b)

1	5	1
×		6

c)

2	4	2
×		4

d)

1	7	1
×		5

e)

2	5	6
×		3

5. Multiply.

a) 5 × 134 b) 7 × 421 c) 6 × 132 d) 9 × 134 e) 8 × 124 f) 6 × 135

6. Draw a picture in your notebook to show the result of the multiplication.

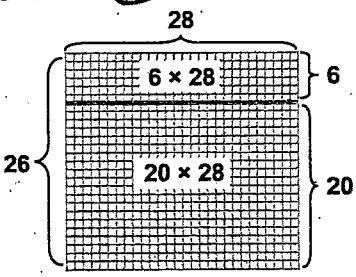
a) × 2

b) × 4

c) × 3

NS6-28: Multiplying – 2-Digit by 2-Digit #3

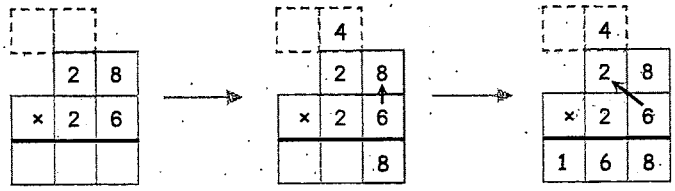
Grace multiplies **26 × 28** by splitting the product into a sum of two smaller products.



26 × 28 = (6 × 28) + (20 × 28)
= 168 + 560
= 728

She keeps track of the steps of the multiplication using a chart.

Step 1:
She multiplies **6 × 28**:



1. Practice the first step of the multiplication.

a)

	2	4
×	1	3

b)

	3	6
×	2	3

c)

	3	3
×	3	6

d)

	6	2
×	4	4

e)

	1	6
×	3	5

f)

	2	5
×	4	3

g)

	3	6
×	4	3

h)

	2	4
×	5	6

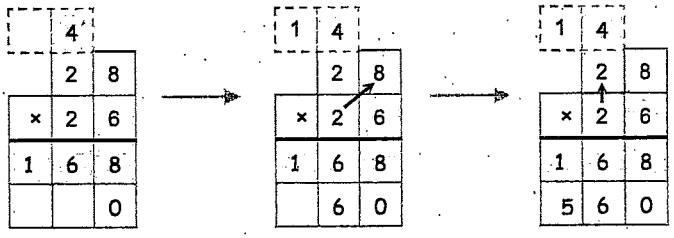
i)

	3	4
×	2	6

j)

	3	7
×	1	8

Step 2:
Grace multiplies **20 × 28**.
(Notice that she starts by writing a 0 in the ones place because she is multiplying by 20.)



2. Practice the second step of the multiplication.

a)

		1	
		3	4
	×	4	3
	1	0	2

b)

		2	
		4	5
	×	2	4
	1	8	0

c)

		1	
		6	9
	×	6	2
	1	3	8

d)

		3	
		5	6
	×	3	6
	3	3	6

e)

		3	
		6	7
	×	2	5
	3	3	5