

21.01.21

WALT: Multiply 2 digits by 2 digits

Vocabulary check

multiply  
multiplicand  
multiplier  
product  
place value

$$\begin{array}{r} 15 \\ \times 2 \\ \hline 30 \end{array}$$

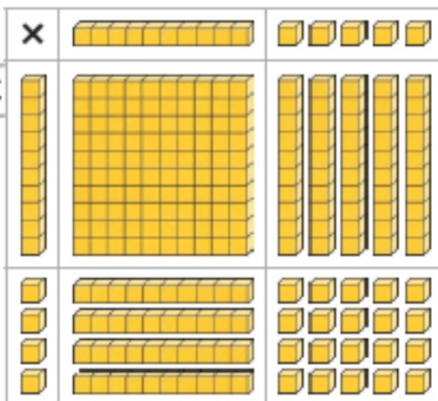
multiplicand  
multiplier  
product

| Thousands | Hundreds | Tens | Ones |
|-----------|----------|------|------|
|           |          |      |      |
|           |          |      |      |
|           |          |      |      |

$$15 \times 14 =$$

$$(15 \times 10) + (15 \times 4)$$

|    |     |    |
|----|-----|----|
| ×  | 10  | 5  |
| 10 | 100 | 50 |
| 4  | 40  | 20 |



$$\begin{array}{r} 15 \\ \times 14 \\ \hline \end{array}$$

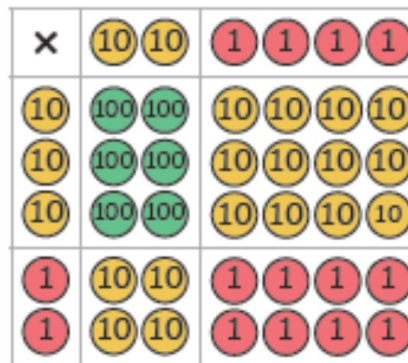
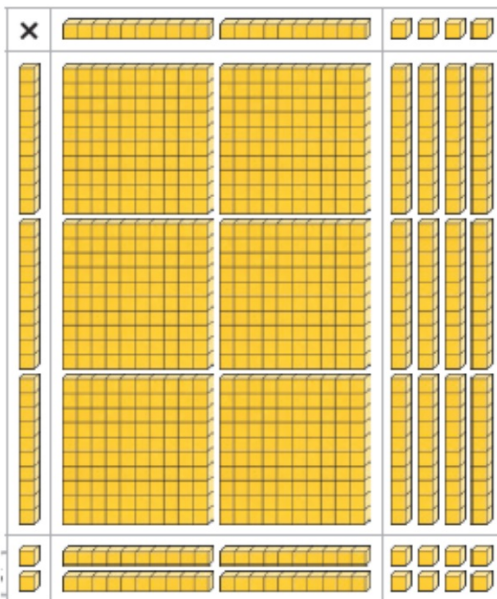
0

I do

$$24 \times 32 =$$

$$(24 \times 30) + (24 \times 2) =$$

|    |     |     |
|----|-----|-----|
| ×  | 20  | 4   |
| 30 | 600 | 120 |
| 2  | 40  | 8   |

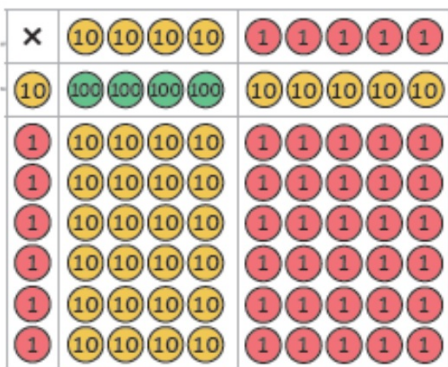


$$\begin{array}{r} 24 \\ \times 32 \\ \hline \end{array}$$

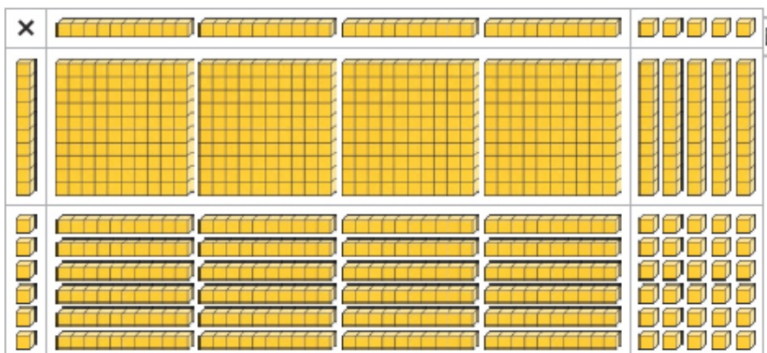
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$$45 \times 16 =$$

$$(45 \times 10) + (45 \times 6)$$



|    |     |    |
|----|-----|----|
| ×  | 40  | 5  |
| 10 | 400 | 50 |
| 6  | 240 | 30 |



$$\begin{array}{r} \phantom{x} 45 \\ x 16 \\ \hline \end{array}$$

0

## 2-digit Multiplication

$$\begin{array}{r} 67 \\ \times 23 \\ \hline 201 \end{array}$$

1. Multiply by the one's place

$$\begin{array}{r} 67 \\ \times 23 \\ \hline 201 \\ 0 \end{array}$$

2. Put a zero to hold the one's place

$$\begin{array}{r} 67 \\ \times 23 \\ \hline 201 \\ 1340 \\ \hline 1340 \end{array}$$

3. Multiply by the ten's place

$$\begin{array}{r} 67 \\ \times 23 \\ \hline 201 \\ 1340 \\ \hline 1541 \end{array}$$

4. Add the numbers

$$\begin{array}{r} 48 \\ \times 32 \\ \hline \end{array}$$

0

### 2-digit Multiplication

$$\begin{array}{r} 67 \\ \times 23 \\ \hline 201 \end{array}$$

1. Multiply by the one's place

$$\begin{array}{r} 67 \\ \times 23 \\ \hline 201 \\ 0 \end{array}$$

2. Put a zero to hold the one's place

$$\begin{array}{r} 67 \\ \times 23 \\ \hline 201 \\ 1340 \\ \hline 1340 \end{array}$$

3. Multiply by the ten's place

$$\begin{array}{r} 67 \\ \times 23 \\ \hline 201 \\ 1340 \\ \hline 1541 \end{array}$$

4. Add the numbers

We do

0

$$\begin{array}{r} \times 56 \\ 32 \\ \hline \end{array}$$

$$35 \times 23 =$$

$$45 \times 31 =$$

## Hinge

Which of these is correct for  $45 \times 23 =$

A

$$\begin{array}{r} \overset{1}{\cancel{1}} \\ 45 \\ \times 23 \\ \hline 135 \\ 90 \\ \hline 225 \end{array}$$

B

$$\begin{array}{r} \overset{1}{\cancel{1}} \\ 45 \\ \times 23 \\ \hline 135 \\ 900 \\ \hline 1035 \\ 1 \end{array}$$

C

$$\begin{array}{r} \overset{1}{\cancel{1}} \\ 45 \\ \times 23 \\ \hline 125 \\ 800 \\ \hline 925 \end{array}$$

D I'm not sure

Try it

1.  $27 \times 13 =$

2.  $35 \times 14 =$

3.  $36 \times 22 =$

4.  $54 \times 39 =$

5.  $41 \times 25 =$

6.  $56 \times 23 =$

7.  $43 \times 53 =$

8.  $23 \times 84 =$

### 2-digit Multiplication

$$\begin{array}{r} 67 \\ \times 23 \\ \hline 201 \end{array}$$

1. Multiply by the one's place

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2. Put a zero to hold the one's place

$$\begin{array}{r} 67 \\ \times 23 \\ \hline 201 \\ 1340 \end{array}$$

3. Multiply by the ten's place

$$\begin{array}{r} 67 \\ \times 23 \\ \hline 201 \\ 1340 \\ \hline 1541 \end{array}$$

4. Add the numbers



Use it

Calculate the missing number in these calculations.

$$\begin{array}{r} 1 \quad \begin{array}{r} 2 \_ \\ \times 25 \\ \hline 130 \\ 520 \\ \hline \end{array} \end{array}$$

$$\begin{array}{r} 2 \quad \begin{array}{r} 43 \\ \times 1 \_ \\ \hline 258 \\ 430 \\ \hline \end{array} \end{array}$$

$$\begin{array}{r} 3 \quad \begin{array}{r} 5 \_ \\ \times 26 \\ \hline 318 \\ 1060 \\ \hline \end{array} \end{array}$$

$$\begin{array}{r} 4 \quad \begin{array}{r} 23 \\ \times 1 \_ \\ \hline 138 \\ 230 \\ \hline \end{array} \end{array}$$

$$\begin{array}{r} 5 \quad \begin{array}{r} 3 \_ \\ \times 52 \\ \hline 68 \\ 1700 \\ \hline \end{array} \end{array}$$

$$\begin{array}{r} 6 \quad \begin{array}{r} 43 \\ \times 5 \_ \\ \hline 86 \\ 2150 \\ \hline \end{array} \end{array}$$

Prove it

When you multiply a 2 digit number by a 2 digit number the answer will be a 5 digit number - always / sometimes or never?  
Explain your answer.

