Classwork 5-11-2020

Today we will work on multiplying larger numbers.

Good morning and Hello from Mrs. Cronin!
Today is 5/11/2020

Where To Find Your Work: https://lynncronin.weebly.com/

Learning Objectives: Today we will begin to learn how to multiply larger numbers, then we will study on Quizlet

Learning Activities: PowerPoint, Quizlet

How We Communicate: lcronin@wtps.org / 856-857-7707

MA.3.OA.C, MA.3.OA.C.7 - MA.4.OA.A - MA.5.NBT.A

Multiply 6 x 12.

$$\begin{array}{r} 12 \\ \times\ 6 \\ \hline \end{array}$$

Huh? We never learned this!!

$$\begin{array}{r} 12 \\ \times\ 6 \\ \hline \end{array}$$

I know! Now you will!

12

x 6

To multiply 6 times 12 you are actually multiplying 6 times 10 and then adding 6 times 2.
(because the 1 in the tens place equals 10 and the 2 in the ones place equals 2)

$$\begin{array}{r} 12 \\ \times\ 6 \\ \hline \end{array}$$

Let's first split it up and do the multiplication

$$12 \longrightarrow 10 + 2$$

$$\underline{\times\ 6}$$

Do the multiplication 10x6 and 2x6

$$\begin{array}{r} 12 \\ \times\ 6 \\ \hline \end{array} \longrightarrow \begin{array}{r} 10 \\ \times\ 6 \\ \hline \end{array} + \begin{array}{r} 2 \\ \times\ 6 \\ \hline \end{array}$$

+

Then add the two answers

$$12 \longrightarrow 10 + 2$$

$$\underline{\times\ 6} \qquad \underline{\times\ 6} \qquad \underline{\times\ 6}$$

$$60 + 12$$

Then add the two answers

$$12 \longrightarrow 10 + 2$$

$$\underline{\times\ 6} \qquad \underline{\times\ 6} \qquad \underline{\times\ 6}$$

$$60 + 12$$

$$60 + 12 = 72$$

Let's try a couple of that way. What is 22 x 3?

$$\begin{array}{r} 22 \\ \times\ 3 \\ \hline \end{array}$$

22 is the same as 20 plus 2

$$22 \longrightarrow 20 + 2$$

$$\underline{\times\ 3}$$

They are both being multiplied by three

$$22 \times 3 \longrightarrow 20 \times 3 + 2 \times 3$$

$$+$$

When we do the math…

$$\begin{array}{r} 22 \\ \times\ 3 \\ \hline \end{array} \longrightarrow \begin{array}{r} 20 \\ \times\ 3 \\ \hline 60 \end{array} + \begin{array}{r} 2 \\ \times\ 3 \\ \hline 6 \end{array}$$

When we do the math…

$$\begin{array}{r} 22 \\ \times\ 3 \\ \hline \end{array} \longrightarrow \begin{array}{r} 20 \\ \times\ 3 \\ \hline 60 \end{array} + \begin{array}{r} 2 \\ \times\ 3 \\ \hline 6 \end{array}$$

$$60 + 6 = 66$$

Try another one. What does 21 x 3 =

$$\begin{array}{r} 21 \\ \times\ 3 \\ \hline \end{array}$$

First break 21 into its tens and ones

Now add the multiply by 3

$$21 \longrightarrow 20 + 1$$

$$\underline{\times\ 3}$$

Now do the math…

21	→	20	+	1
x 3		x 3		x 3

Now add them together…

$$\begin{array}{r} 21 \\ \times\ 3 \\ \hline \end{array} \longrightarrow \begin{array}{r} 20 \\ \times\ 3 \\ \hline 60 \end{array} + \begin{array}{r} 1 \\ \times\ 3 \\ \hline 3 \end{array}$$

$$\begin{array}{r} 21 \\ \underline{\times\ 3} \end{array} \longrightarrow \begin{array}{rcr} 20 & + & 1 \\ \underline{\times\ 3} & & \underline{\times\ 3} \\ 30 & + & 6 \end{array}$$

$$30 + 6 = 36$$

Get it? Split the two-digit number into its tens & its ones – then do the multiplication, then add.

$$21 \longrightarrow 20 + 1$$

$$\underline{\times\ 3} \qquad \underline{\times\ 3} \quad \underline{\times\ 3}$$

$$60 + 3$$

$$60 + 3 = 63$$

Please complete these 5 problems then send me the answers!

1. What is 24 x 2

24	→	20	+	4
x 2		x 2		x 2

2. What is 14 x 2?

14	→	10	+	4
x 2		x 2		x 2

3. What is 11x 4?

11

x 4

4. What is 23 x 2?

23

x 2

4. What is 43 x 3?

43

x 3

Write down the answers
and send me a picture!

then work on Quizlet:

https://quizlet.com/_8e0few?x=1qqt&i=2qrr7s

No First-In-Math today!