

Lesson 4-1

Multiply Multiples of 10



Objective: I can use mental math strategies to multiply 2-digit multiples of 10 by 2-digit multiples of 10.



Review: Multiples of 10 are the product of 10 and any other number. For example...

$$10 \times 1 = 10$$

$$10 \times 2 = 20$$

$$10 \times 3 = 30$$

$$10 \times 4 = 40$$

$$10 \times 5 = 50$$

10, 20, 30, 40,
and 50 are all
multiples of 10

For multiples of 10, you can also just skip count by 10s!

10, 20, 30, 40, 50 are multiples.

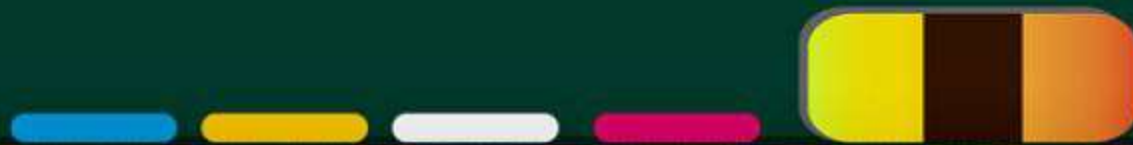
Remember, multiples don't stop at 100. They keep going!

100, 110, 120, 130, 140, 150...



When multiplying two multiples of ten, look for the basic fact first. For example in 50×20 we look for the basic fact 5×2 first. $5 \times 2 = 10$. Then we attach the two zeros from the factors onto the product.


$$50 \times 20 = 1,000$$



$$50 \times 20$$

$$5 \times 2 = 10$$

$$50 \times 20 = \underline{\hspace{2cm}}$$

$$50 \times 20 = 1,000$$


* Notice there are **2 zeros** in the **factors** and there are **3 zeros** in the **product**.

Another WAY: When multiplying two multiples of ten, you can use basic fact and place value. For example, in 50×20 we look for the basic fact...

$$\begin{aligned} 50 \times 20 &= 5 \text{ tens} \times 2 \text{ tens} \\ &= 10 \text{ hundreds} \\ &= 1,000 \end{aligned}$$

$10 \times 10 = 100$ tens
or 10 hundreds



Try it!

$$80 \times 50 =$$

$$10 \times 10 =$$



TRY THIS



Did you notice any patterns?

$$80 \times 50 = 4,000$$

$$10 \times 10 = 100$$

Why are there more zeros in the product than there are in the factors?

What's missing? Look for the basic fact!

$$80 \times \underline{\quad} = 800$$

$$50 \times \underline{\quad} = 2,500$$

$$90 \times \underline{\quad} = 3,600$$



TRY THIS

What's missing? Look for the basic fact!

$$80 \times \underline{10} = 800$$

$$50 \times \underline{50} = 2,500$$

$$90 \times \underline{40} = 3,600$$

Try these

$$20 \times 90 =$$

$$8 \times 600 =$$

$$40 \times 700 =$$



TRY THIS

Products

$$20 \times 90 = 1,800$$

$$8 \times 600 = 4,800$$

$$40 \times 700 = 28,000$$

A bag of cat food weighs 20 pounds each. PetSmart ordered 60 bags. How many pounds of cat food did they order in all?



TRY THIS



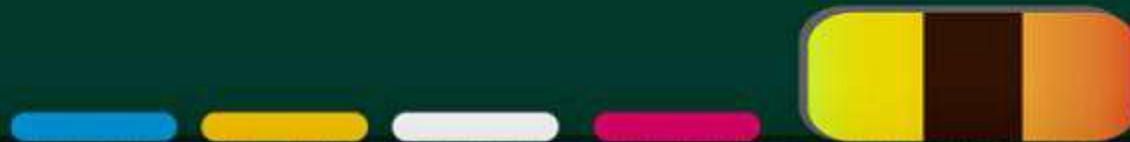
$$20 \times 60 = 1,200 \text{ pounds}$$



HELA has 30 scholars in each classroom. If there are 40 classrooms, how many scholars attend HELA?



TRY THIS



$$30 \times 40 = 1,200$$

There are 1,200
scholars at HELA.



TRY THIS



Reezy is designing a bed for her bedroom. The bed is 50 inches wide and 70 inches long. What is the area of her bed in SQUARE INCHES?



ALRIGHT
NOW

Area = length x width

$50 \times 70 = 3,500$ square
inches



Homework

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