

January

12 Times tables

$$12 \times 0 = 0$$

$$12 \times 1 = 12$$

$$12 \times 2 = 24$$

$$12 \times 3 = 36$$

$$12 \times 4 = 48$$

$$12 \times 5 = 60$$

$$12 \times 6 = 72$$

$$12 \times 7 = 84$$

$$12 \times 8 = 96$$

$$12 \times 9 = 108$$

$$12 \times 10 = 120$$

$$12 \times 11 = 132$$

$$12 \times 12 = 144$$

## Arithmetic

1.ᵁ

$$41 \times 4$$

2.ᵁ

$$249 \times 7$$

3.ᵁ

$$804 \times 7$$

4.ᵁ

$$9323 \times 5$$

## Answers

1.0

164

2.0

1743

3.0

5628

4.0

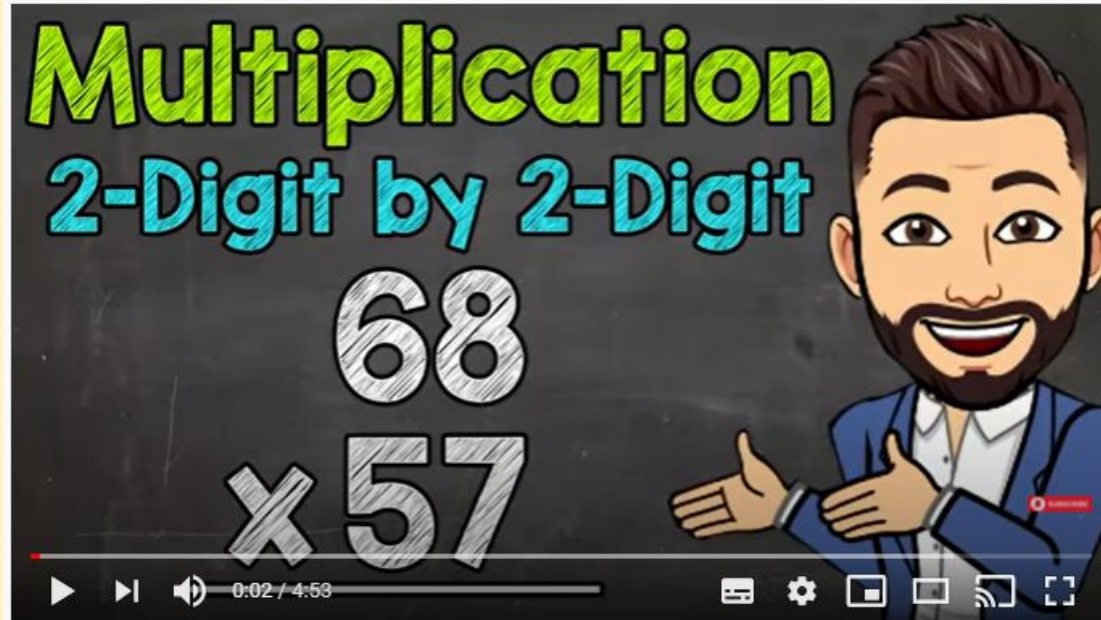
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# 06.01.21

LO: To multiply 2 digits by 2 digits

Home learning support if needed. Please click on link and watch video.

<https://www.youtube.com/watch?v=PZjIT9CH6bM>



## Strategy

### MULTIPLY BY 2-DIGIT #'s

Step 1: Multiply the top number by the ones digit

$$\begin{array}{r} 328 \\ \times 14 \\ \hline 1,312 \end{array}$$

Step 2: Put your place-holder zero


$$\begin{array}{r} 328 \\ \times 14 \\ \hline 1,312 \\ 0 \end{array}$$

Step 3: Multiply the top number by the tens digit

$$\begin{array}{r} 328 \\ \times 14 \\ \hline 1,312 \\ 3,280 \end{array}$$

Step 4: Add

$$\begin{array}{r} 328 \\ \times 14 \\ \hline 1,312 \\ + 3,280 \\ \hline 4,592 \end{array}$$

 Complete the calculation to work out  $23 \times 14$

		2	3
$\times$		1	4
		9	2
		<small>1</small>	
	2	3	0

( $23 \times 4$ )

( $23 \times 10$ )

Use this method to calculate:

$34 \times 26$      $58 \times 15$      $72 \times 35$





Complete to solve the calculation.

		4	6	
×		2	7	
	3	2	2	( <u>    </u> × <u>    </u> )
	9	2	0	( <u>    </u> × <u>    </u> )

Use this method to calculate:

$$27 \times 39 \quad 46 \times 55 \quad 94 \times 49$$



# Mathematical Talk

Why is the zero important?

What numbers are being multiplied in the first line and in the second line?

When do we need to make an exchange?

What can we exchange if the product is 42 ones?

If we know what  $38 \times 12$  is equal to, how else could we work out  $39 \times 12$ ?

# TASKs

Task 1 Complete the questions on this presentation

Task 2 complete the worksheet Wednesday Worksheet, you decide where you start. Ensure you challenge yourself.

Once finished, do the thinking deeper questions on the next slides.

Mark your work once finished. Remember do not cheat. You will not learn that way.

# Multiply 2-digits by 2-digits

1 Complete the multiplications.

a)  $6 \times 6 = \square$

d)  $7 \times 9 = \square$

$6 \times 60 = \square$

$7 \times 90 = \square$

b)  $12 \times 8 = \square$

e)  $21 \times 4 = \square$

$12 \times 80 = \square$

$21 \times 40 = \square$

c)  $32 \times 3 = \square$

f)  $48 \times 3 = \square$

$32 \times 30 = \square$

$48 \times 30 = \square$

How did you work out your answers?



2 Fill in the missing numbers.

a)

		4	3	
	x		1	3
		1	2	9
		4	3	0

(43 × 3)

(43 × 10)

c)

	x			
		1	0	5
		4	2	0

(21 × 5)

(21 × 20)

b)

		2	1	
	x		1	6
		1	2	6
		2	1	0

( $\square \times \square$ )

( $\square \times \square$ )

3 Mo is calculating  $34 \times 23$

Here is his working.

		3	4
x		2	3
	1	0	2
	6	8	
	1	7	0

What mistake has Mo made?

What is the correct answer?

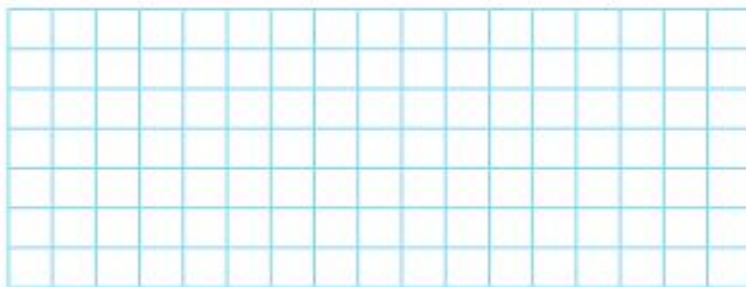
You may use the blank grid for your workings.


4

Work out the multiplications.

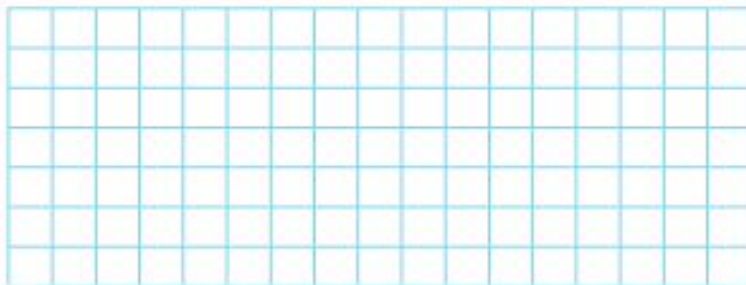
a)  $52 \times 34 =$

c)  $46 \times 64 =$



b)  $22 \times 56 =$

d)  $47 \times 63 =$



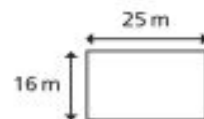
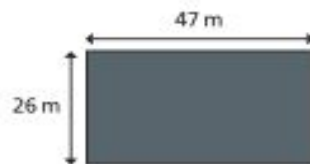
5

A machine prints 92 labels every minute.

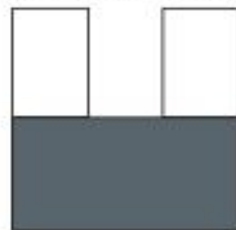
How many labels will it print in three-quarters of an hour?

6

Here are two rectangles.



a) What is the area of this compound shape?




b) What is the area of the shaded part?




Compare methods and answers with a partner.  
What is the same and what is different?

# Multiply 2-digits by 2-digits

1 Complete the multiplications.

a)  $6 \times 6 = 36$

$6 \times 60 = 360$

b)  $12 \times 8 = 96$

$12 \times 80 = 960$

c)  $32 \times 3 = 96$

$32 \times 30 = 960$

d)  $7 \times 9 = 63$

$7 \times 90 = 630$

e)  $21 \times 4 = 84$

$21 \times 40 = 840$

f)  $48 \times 3 = 144$

$48 \times 30 = 1,440$

How did you work out your answers?



2 Fill in the missing numbers.

a)

			4	3	
			1	3	
		×			
			1	2	9
			4	3	0
			5	5	9

( $43 \times 3$ )  
( $43 \times 10$ )

c)

			2	1	
			2	5	
		×			
			1	0	5
			4	2	0
			5	2	5

( $21 \times 5$ )  
( $21 \times 20$ )

b)

			2	1	
			1	6	
		×			
			1	2	6
			2	1	0
			3	3	6

( $21 \times 6$ )  
( $21 \times 10$ )

3 Mo is calculating  $34 \times 23$

Here is his working.

			3	4	
			2	3	
		×			
			1	0	2
			6	8	
			1	7	0

What mistake has Mo made?

What is the correct answer?

You may use the blank grid for your workings.

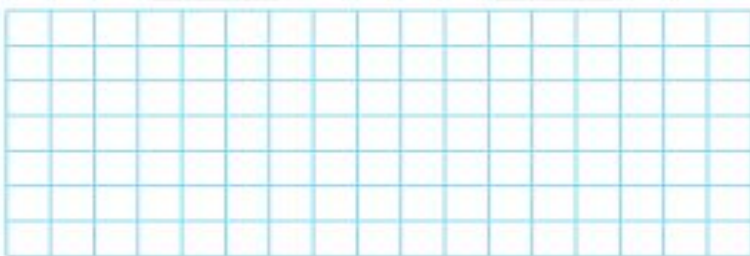
			3	4	
			2	3	
		×			
			1	0	2
			6	8	0
			7	8	2

4

Work out the multiplications.

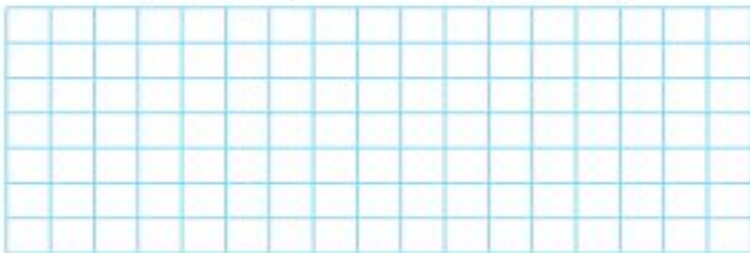
a)  $52 \times 34 =$  1,768

c)  $46 \times 64 =$  2,944



b)  $22 \times 56 =$  1,232

d)  $47 \times 63 =$  2,961



5

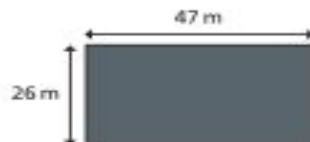
A machine prints 92 labels every minute.

How many labels will it print in three-quarters of an hour?

4,140

6

Here are two rectangles.



a) What is the area of this compound shape?

2,022 m<sup>2</sup>

b) What is the area of the shaded part?

822 m<sup>2</sup>

Compare methods and answers with a partner.  
What is the same and what is different?

Amir has multiplied 47 by 36



		4	7
×		3	6
	2	8	2
	1	4	1
	3	2	3

Alex says,



Amir is wrong because  
the answer should be  
1,692 not 323

Who is correct?

What mistake has been made?

Thinking

Deeper

Alex is correct.  
Amir has forgotten  
to use zero as a  
place holder when  
multiplying by 3  
tens.