

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

1.0

$$84 \times 9$$

2.0

$$386 \times 2$$

3.0

$$670 \times 5$$

4.0

$$5666 \times 3$$

Answers

1.0

756

2.0

772

3.0

3350

4.0

16998

07.01.21

LO: To multiply 3 digits by 2 digits

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

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

Step 1 ✓ Step 4 ✓
Step 2 ✓ Step 5 ✓
Step 3 ✓ Step 6 ✓

$$\begin{array}{r} 1324 \\ \times 46 \\ \hline 7944 \\ 52960 \\ \hline 12960 \end{array}$$

8:24

Math Antics - Multi-Digit Multiplication Pt 2

4M views • 8 years ago



Learn More at mathantics.com Visit <http://www.mathantics.com> for more Free math videos and additional subscription based ...

Subtitles

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:

		1	3	2
x			1	4
		5	2 ₁	8
	1	3	2	0

Use this method to calculate:

$$(132 \times 4)$$

$$264 \times 14$$

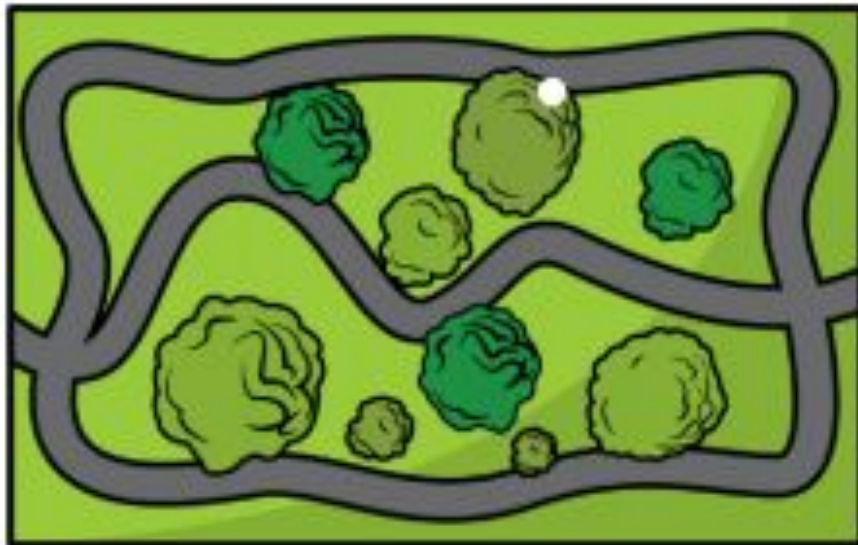
$$264 \times 28$$

$$(132 \times 10)$$

What do you notice about your answers?

Home learning - use a calculator to check your answers

■ A playground is 128 yards by 73 yards.



Calculate the area of the playground.

Mathematical Talk

Why is the zero important?

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

When do we need to make an exchange?

What happens if there is an exchange in the last step of the calculation?

TASKs

Task 1 Complete the questions on this presentation

Task 2 complete the worksheet Thursday 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 3-digits by 2-digits

1 Complete the multiplications.

a) $13 \times 3 =$

c) $25 \times 4 =$

$13 \times 30 = \boxed{}$

$25 \times 40 = \boxed{}$

b) $130 \times 2 =$

d) $204 \times 4 =$

$130 \times 20 =$

$204 \times 40 =$

2 Complete the multiplications.

a)

			2	3	1
	×			1	3
			6	9	3
		2	3	1	0

(231×3)

(231 × 10)

b)

			5	1	2
	×			2	4
		<u>2</u> ₂	0	4	8
		1	0	2	4

$$(\quad \times \quad)$$

$$(\quad \times \quad)$$

3 Brett is calculating 216×23

$$\begin{array}{r} 216 \\ \times 23 \\ \hline 6480 \\ 432 \\ \hline 6912 \end{array}$$

What mistake has Brett made?

What is the correct answer?

4 Complete the multiplications.

a) $142 \times 31 =$

c) $214 \times 53 =$

A blank sheet of graph paper with a light blue grid pattern. The grid consists of small squares, approximately 1 cm by 1 cm each, arranged in a uniform pattern across the page. There are no margins or other markings on the paper.

b) $337 \times 46 =$

d) $24 \times 183 =$

A blank sheet of graph paper with a light blue grid pattern. The grid consists of small squares, typical of standard graph paper used for mathematics or science. There are no markings, numbers, or text on the page.

5 Some children are asked to work out 308×19

a) Which is the best estimate to use to check their answers?

Circle your choice and work out the answer to your estimate.

300×10

300×20

310×20

300×19

estimate answer =

b) Explain the reasons for your choice.

c) Here are answers given by three children.

Nijah 28,028

Filip 5,852

Whitney 2,080

From your estimate, who do you think is correct?

d) Work out the correct answer.

e) What mistakes might the others have made?

6 A football pitch is 128 m long and 52 m wide.

a) What is the area of the pitch?

b) A field is 25,000 m².

How many football pitches could fit in it?

7 Write $>$, $<$ or $=$ to complete each statement.

a) 146×64 164×46

135×53 153×35

b) What do you notice?

Does this always happen?

8 Miss Rose is ordering some pencils.

She orders 17 of pack A, 14 of pack B and 4 of pack C.

Pack A



Pack B



Pack C



How many pencils does Miss Rose order?

Each pencil costs 16p.

How much does Miss Rose spend on pencils?

Multiply 3-digits by 2-digits

Maths

1 Complete the multiplications.

a) $13 \times 3 =$	39
--------------------	----

c) $25 \times 4 =$	100
--------------------	-----

$13 \times 30 =$	390
------------------	-----

$25 \times 40 =$	1,000
------------------	-------

b) $130 \times 2 =$	260
---------------------	-----

d) $204 \times 4 =$	816
---------------------	-----

$130 \times 20 = 2,600$

$204 \times 40 = 8,160$

2 Complete the multiplications.

a)

			2	3	1		
x				1	3		
			6	9	3		
		2	3	1	0		
		3	0	0	3		
		1	1				

(231 × 3)

(231 x 10)

b)

				5	1	2	
x					2	4	
			2	0	4	8	
	1	0	2	4	0		
	1	2	2	8	8		

$$(512 \times 4)$$
$$(512 \times 20)$$

3 Brett is calculating 216×23

$$\begin{array}{r} 216 \\ \times 23 \\ \hline 6480 \\ 432 \\ \hline 6912 \end{array}$$

What mistake has Brett made?

What is the correct answer?

4,968

4 Complete the multiplications.

a) $142 \times 31 = 4,402$

c) $214 \times 53 = 11,342$

b) $337 \times 46 = 15,502$

d) $24 \times 183 = 4,392$

- 5 Some children are asked to work out 308×19

a) Which is the best estimate to use to check their answers?

Circle your choice and work out the answer to your estimate.

300×10

300×20

310×20

300×19

estimate answer = $6,200$

b) Explain the reasons for your choice.

c) Here are answers given by three children.

Nijah

28,028

Filip

5,852

Whitney

2,080

From your estimate, who do you think is correct? Filip

d) Work out the correct answer.

$5,852$

e) What mistakes might the others have made?

- 6 A football pitch is 128 m long and 52 m wide.

a) What is the area of the pitch?

$6,656 \text{ m}^2$

b) A field is $25,000 \text{ m}^2$.

How many football pitches could fit in it?

3

- 7 Write $>$, $<$ or $=$ to complete each statement.

a) 146×64



164×46

135×53



153×35

b) What do you notice?

Does this always happen?

- 8 Miss Rose is ordering some pencils.

She orders 17 of pack A, 14 of pack B and 4 of pack C.

Pack A



Pack B



Pack C



How many pencils does Miss Rose order?

697

Each pencil costs 16p.

How much does Miss Rose spend on pencils?

$£11.52$

Thinking deeper

$$22 \times 111 = 2442$$

$$23 \times 111 = 2553$$

$$24 \times 111 = 2664$$

What do you think the answer to 25×111 will be?

What do you notice?

Does this always work?

Pencils come in boxes of 64

A school bought 270 boxes.

Rulers come in packs of 46

A school bought 720 packs.

How many more rulers were ordered than pencils?



Answers

$$22 \times 111 = 2442$$

$$23 \times 111 = 2553$$

$$24 \times 111 = 2664$$

What do you think the answer to 25×111 will be?

What do you notice?

Does this always work?

The pattern stops at up to 28×111 because exchanges need to take place in the addition step.

Pencils come in boxes of 64
A school bought 270 boxes.
Rulers come in packs of 46
A school bought 720 packs.
How many more rulers were ordered than pencils?



15,840