



Year 5 Maths Answers

Monday – Multiply 4- digits by 1-digit

Multiply 4-digits by 1-digit

1 Complete the sentences to describe the multiplication.

| Th | H | T | O |
|----|---|---|---|
| 2 | 2 | 1 | 4 |
| 0 | 0 | 0 | 4 |
| 0 | 0 | 0 | 4 |
| 0 | 0 | 0 | 4 |

There are 9 ones altogether.
 There are 3 tens altogether.
 There are 6 hundreds altogether.
 There are 6 thousands altogether.
 $2,214 \times 3 = \underline{6,639}$

2 Complete the multiplication.
 Use the place value chart to help you.

| Th | H | T | O |
|----|---|---|---|
| 2 | 2 | 1 | 4 |
| 0 | 0 | 0 | 4 |
| 0 | 0 | 0 | 4 |
| 0 | 0 | 0 | 4 |

$2,214 \times 3 = \underline{6,639}$

3 A football stadium holds 2,214 people.
 The stadium is full for 4 matches in a row.
 What was the attendance for all 4 matches?

| Th | H | T | O |
|----|---|---|---|
| 2 | 2 | 1 | 4 |
| 0 | 0 | 0 | 4 |
| 0 | 0 | 0 | 4 |
| 0 | 0 | 0 | 4 |

The attendance for all 4 matches was 8,856.

4 Nijah is calculating $2,430 \times 3$
 She makes this place value chart to help her.

| Th | H | T | O |
|----|---|---|---|
| 2 | 4 | 3 | 0 |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 |

She gets the answer 729.
 What mistake has Nijah made?
She hasn't put her counters in the correct columns.
 What is the correct answer? 7,290

Task 2

5 Complete the multiplications.

a) $3,126 \times 3 = \underline{9,378}$ d) $4,132 \times 6 = \underline{24,792}$

b) $4,812 \times 2 = \underline{9,624}$ e) $1,502 \times 5 = \underline{7,510}$

6 Ron is working out $7,423 \times 0$

| | | | |
|---|---|---|---|
| 7 | 4 | 2 | 3 |
| × | | | 0 |
| 7 | 4 | 2 | 3 |

The answer is 7,423.

Do you agree with Ron? No
 Did Ron have to use a column method? Is there a quicker way?

7 Work out these multiplications.

$2,846 \times 2 = \underline{5,692}$
 $2,846 \times 4 = \underline{11,384}$
 $2,846 \times 6 = \underline{17,076}$

What do you notice about the answers?

8 $248 \times 10 = 2,480$

Without using the formal method, how could you use this fact to calculate 248×9 ?

$248 \times 9 = 248 \times 10 - 248 = 2,480 - 248 = 2,232$

Check your answer using the formal method.

| | | | |
|---|---|---|---|
| 2 | 4 | 8 | |
| × | | 9 | |
| 2 | 2 | 3 | 2 |

Which method was easier?

9 Use each digit card once to write a multiplication.

1 2 3 4 5

| | | | | |
|---|--|--|--|--|
| | | | | |
| × | | | | |
| | | | | |

How many different products can you find?
Five (any number)

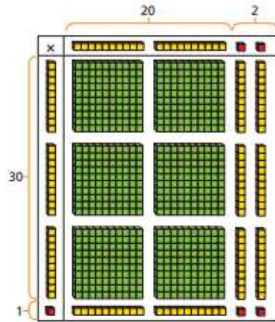
What is the closest product to 8,000?
8,270

Tuesday- Multiply 2-digits

Multiply 2-digits (area model)

- 1 Kim is using base 10 to work out 31×22 .

Use Kim's model to help you complete the sentences.



There are ones altogether.

There are tens altogether.

There are hundreds altogether.

$31 \times 22 =$

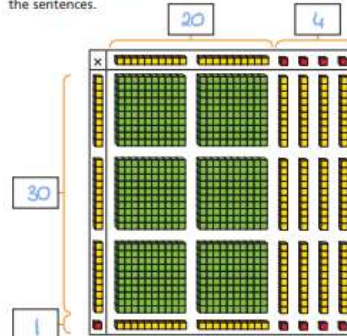
- 2 Use base 10 to work out the multiplications.

a) $12 \times 14 =$

b) $23 \times 13 =$

- 3 Amir is using base 10 to calculate 31×24

- a) Add the missing information to the area model and complete the sentences.



There are ones altogether.

There are tens altogether.

There are hundreds altogether.

- b) Describe any exchanges you need to make.

Exchange 10 tens for 1 hundred

- c) Complete the multiplication.

$31 \times 24 =$

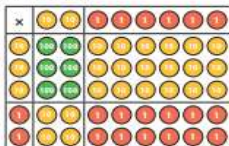
- 4 Use base 10 to work out these multiplications.

a) $25 \times 15 =$

b) $36 \times 12 =$

Task 2

- 5 Use the place value counters to complete the multiplication grid and sentence.



| | | |
|----|-----|-----|
| x | 20 | 6 |
| 30 | 600 | 180 |
| 2 | 40 | 12 |

$26 \times 32 =$

- 6 Use an area model to help you complete the multiplication.

a) $28 \times 14 =$

c) $35 \times 22 =$

| | | |
|----|-----|----|
| x | 20 | 8 |
| 10 | 200 | 80 |
| 4 | 80 | 32 |

b) $27 \times 16 =$

d) $45 \times 36 =$

| | | |
|----|-----|----|
| x | 20 | 7 |
| 10 | 200 | 70 |
| 6 | 120 | 42 |

- 7 Complete the multiplications.

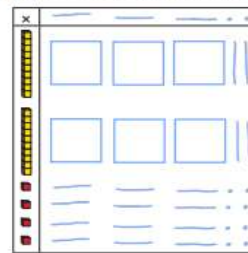
$21 \times 24 =$

$31 \times 25 =$

$18 \times 26 =$

- 8 $24 \times$ $= 768$

Complete the area model to find the missing number.



- 9 Use each digit card once to write a multiplication.

e.g. $23 \times 45 = 1,035$

How many different answers can you find?

Various answers

How many products are there between 1,000 and 1,500?

Wednesday- Multiply 2-digits (Part two)

Multiply 2-digits (area model)

1 Kim is using base 10 to work out 31×22 .
Use Kim's model to help you complete the sentences.

There are ones altogether.
 There are tens altogether.
 There are hundreds altogether.
 $31 \times 22 =$

2 Use base 10 to work out the multiplications.
 a) $12 \times 14 =$ b) $23 \times 13 =$

3 Amir is using base 10 to calculate 31×24
 a) Add the missing information to the area model and complete the sentences.

There are ones altogether.
 There are tens altogether.
 There are hundreds altogether.

b) Describe any exchanges you need to make.
Exchange 10 tens for 1 hundred

c) Complete the multiplication.
 $31 \times 24 =$

4 Use base 10 to work out these multiplications.
 a) $25 \times 15 =$ b) $36 \times 12 =$

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Task 2

5 Use the place value counters to complete the multiplication grid and sentence.

| | | |
|----|-----|-----|
| x | 20 | 6 |
| 30 | 600 | 180 |
| 2 | 40 | 12 |

$26 \times 32 =$

6 Use an area model to help you complete the multiplication.

a) $28 \times 14 =$ c) $35 \times 22 =$

| | | |
|----|-----|----|
| x | 20 | 8 |
| 10 | 200 | 80 |
| 4 | 80 | 32 |

b) $27 \times 16 =$ d) $45 \times 36 =$

| | | |
|----|-----|----|
| x | 20 | 7 |
| 10 | 200 | 70 |
| 6 | 120 | 42 |

7 Complete the multiplications.
 $21 \times 24 =$ $31 \times 25 =$
 $18 \times 26 =$

8 $24 \times$ $= 768$
 Complete the area model to find the missing number.

9 Use each digit card once to write a multiplication.

e.g. $23 \times 45 = 1,035$

How many different answers can you find?
Various answers

How many products are there between 1,000 and 1,500?

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Thursday- Multiply 2-digits by 2- digits

Multiply 2-digits by 2-digits

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1 Complete the multiplications.

| | |
|---|---|
| a) $6 \times 6 = $ <input style="width: 50px; border: 1px solid gray;" type="text" value="36"/> $6 \times 60 = $ <input style="width: 50px; border: 1px solid gray;" type="text" value="360"/> | d) $7 \times 9 = $ <input style="width: 50px; border: 1px solid gray;" type="text" value="63"/> $7 \times 90 = $ <input style="width: 50px; border: 1px solid gray;" type="text" value="630"/> |
| b) $12 \times 8 = $ <input style="width: 50px; border: 1px solid gray;" type="text" value="96"/> $12 \times 80 = $ <input style="width: 50px; border: 1px solid gray;" type="text" value="960"/> | e) $21 \times 4 = $ <input style="width: 50px; border: 1px solid gray;" type="text" value="84"/> $21 \times 40 = $ <input style="width: 50px; border: 1px solid gray;" type="text" value="840"/> |
| c) $32 \times 3 = $ <input style="width: 50px; border: 1px solid gray;" type="text" value="96"/> $32 \times 30 = $ <input style="width: 50px; border: 1px solid gray;" type="text" value="960"/> | f) $48 \times 3 = $ <input style="width: 50px; border: 1px solid gray;" type="text" value="144"/> $48 \times 30 = $ <input style="width: 50px; border: 1px solid gray;" type="text" value="1440"/> |

How did you work out your answers?

2 Fill in the missing numbers.

a)

(43×3)
 (43×10)

c)

(21×5)
 (21×20)

b)

(21×6)
 (21×10)

3 Mo is calculating 34×23 . Here is his working.

What mistake has Mo made?
 What is the correct answer?
 You may use the blank grid for your workings.

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Task 2

4 Work out the multiplications.

| | |
|--|--|
| a) $52 \times 34 = $ <input style="width: 80px; border: 1px solid gray;" type="text" value="1,768"/> | c) $46 \times 64 = $ <input style="width: 80px; border: 1px solid gray;" type="text" value="2,944"/> |
| b) $22 \times 56 = $ <input style="width: 80px; border: 1px solid gray;" type="text" value="1,232"/> | d) $47 \times 63 = $ <input style="width: 80px; border: 1px solid gray;" type="text" value="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?

2,022m²

b) What is the area of the shaded part?

822m²

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

Friday- Multiply 3-digits by 2-digits

Multiply 3-digits by 2-digits

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 × 10)

b)

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | 5 | 1 | 2 | |
| x | | | | 2 | 4 | |
| | | | 2 | 0 | 4 | 8 |
| | 1 | 0 | 2 | 4 | 0 | |
| | 1 | 2 | 2 | 8 | 8 | |

(512 × 4)
(512 × 20)

3 Brett is calculating 216×23

| | | | |
|---|---|---|---|
| 2 | 1 | 6 | |
| x | 2 | 3 | |
| 6 | 4 | 8 | 0 |
| 4 | 3 | 2 | |
| 6 | 9 | 1 | 2 |

What mistake has Brett made?
What is the correct answer?

4,968

4 Complete the multiplications.

a) $142 \times 31 = 4,402$ c) $214 \times 53 = 11,342$

| | | | | | | | | | |
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| | | | | | | | | | |

b) $337 \times 46 = 15,502$ d) $24 \times 183 = 4,392$

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
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Task 2

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 m²

b) A field is 25,000 m².

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

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