

## Year 5: Multiplying by a two-digit number: answers

Year 5 - Long Multiplication - Lesson 4.4

**Answers.** Final answers to the worksheet questions. Full step-by-step solutions for every question are free at [websink.site/ks2-sats/maths/year-5/ch04-multiplication/multiplying-by-a-two-digit-number/](https://websink.site/ks2-sats/maths/year-5/ch04-multiplication/multiplying-by-a-two-digit-number/)

### Exercise 4D Multiplying by a two-digit number Non-calculator

**1** Use the grid method to work out each multiplication.

(a)  $23 \times 14 =$

**Answer:** 322

(b)  $48 \times 32 =$

**Answer:** 1,536

(c)  $65 \times 27 =$

**Answer:** 1,755

(d)  $79 \times 53 =$

**Answer:** 4,187

**2** Use the grid method to work out each multiplication. Each number on the side has two digits.

(a)  $145 \times 23 =$

**Answer:** 3,335

(b)  $236 \times 41 =$

**Answer:** 9,676

(c)  $308 \times 52 =$

**Answer:** 16,016

**3** Use long multiplication to work out each multiplication.

(a)  $34 \times 26 =$

**Answer:** 884

(b)  $57 \times 43 =$

**Answer:** 2,451

(c)  $68 \times 75 =$

**Answer:** 5,100

(d)  $92 \times 38 =$

**Answer:** 3,496

**4** Use long multiplication to work out each multiplication. Estimate first.

(a)  $246 \times 35 =$

**Answer:** 8,610

(b)  $417 \times 28 =$

**Answer:** 11,676

(c)  $583 \times 64 =$

**Answer:** 37,312

(d)  $729 \times 47 =$

**Answer:** 34,263

**5** Use long multiplication. These numbers have 4 digits.

(a)  $1,534 \times 26 =$

**Answer:** 39,884

(b)  $2,718 \times 34 =$

**Answer:** 92,412

(c)  $4,096 \times 57 =$

**Answer:** 233,472

**6** Multiply by 3, 4, 6 or 2 first, then by 10.

(a)  $46 \times 30 =$

**Answer:** 1,380

(b)  $125 \times 40 =$

**Answer:** 5,000

(c)  $308 \times 60 =$

**Answer:** 18,480

(d)  $1,500 \times 20 =$

**Answer:** 30,000

**7** Here is some long multiplication for  $426 \times 35$ . The answers are hidden.

$$\begin{array}{r} \phantom{00}426 \\ \times \phantom{00}35 \\ \hline \phantom{000} ? \quad 426 \times 5 \\ + \phantom{000} ? \quad 426 \times 30 \\ \hline \phantom{000} ? \end{array}$$

(a) What is the first row?

**Answer:** 2,130

(b) What is the second row?

**Answer:** 12,780

(c) What is the total?

**Answer:** 14,910

8 This grid shows  $47 \times 36$ . Two boxes are missing.

|    | 40  | 7   |
|----|-----|-----|
| 30 | ?   | 210 |
| 6  | 240 | ?   |

(a) What number is in the top left box?

**Answer:** 1,200

(b) What number is in the bottom right box?

**Answer:** 42

(c) What is  $47 \times 36$ ?

**Answer:** 1,692

9 Work out the answer to each problem.

(a)

A coach holds 53 passengers. A tour company has 28 coaches. How many passengers can the coaches hold altogether?

**Answer:** 1,484 passengers

(b) A pack has 144 pencils. A shop sells 25 packs. How many pencils is that?

**Answer:** 3,600 pencils

(c) A library has 36 shelves. Each shelf holds 235 books. How many books can the library hold?

**Answer:** 8,460 books

10 A baker bakes 125 loaves every day for 28 days. At the end, 300 loaves are left unsold. How many loaves did the baker sell?

**Answer:** 3,200 loaves

11 A theatre sells 128 tickets at £15 each. How much money does the theatre take?

**Answer:** £1,920

12 Mia works out  $285 \times 34$  and gets 1,995. Explain her mistake and find the correct answer.

**Answer:** 9,690. Mia forgot the 0 place holder.

13 Always, sometimes or never?

- (a) In long multiplication by a two-digit number, the second row ends in 0.

**Answer:** Always

- (b) A 2-digit number multiplied by a 2-digit number gives a 4-digit answer.

**Answer:** Sometimes

- 14** Challenge! Use each digit card once: 2, 3, 5, 7. Make two 2-digit numbers to multiply. What is the biggest product you can make?

**Answer:**  $72 \times 53 = 3,816$