

Year 5: Solving problems with multiplication: answers

Year 5 - Long Multiplication - Lesson 4.7

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/solving-problems-with-multiplication/

Exercise 4G Solving problems with multiplication Non-calculator

1 Work out the area of each rectangle.

(a) 9 cm by 6 cm

Answer: 54 cm²

(b) 15 m by 12 m

Answer: 180 m²

(c) 24 cm by 18 cm

Answer: 432 cm²

2 Each rectangle has the area shown and one side as shown. Find the missing side.

(a) Area 96 cm², one side 8 cm

Answer: 12 cm

(b) Area 252 cm², one side 14 cm

Answer: 18 cm

3 Work out each square number.

(a) 9² =

Answer: 81

(b) 12² =

Answer: 144

(c) 15² =

Answer: 225

(d) 20² =

Answer: 400

4 Work out each cube number.

(a) 3³ =

Answer: 27

(b) 5³ =

Answer: 125

(c) $8^3 =$

Answer: 512

(d) $10^3 =$

Answer: 1,000

5 Use factors to work out each multiplication.

(a) $15 \times 14 =$

Answer: 210

(b) $35 \times 18 =$

Answer: 630

(c) $24 \times 15 =$

Answer: 360

6 Write the missing number in each box.

(a) $8 \times 5 = 15 + \boxed{?}$

Answer: 25

(b) $9 \times 4 = \boxed{?} - 12$

Answer: 48

(c) $6 \times 7 = 50 - \boxed{?}$

Answer: 8

(d) $4 \times 9 = 6 \times \boxed{?}$

Answer: 6

7 A rectangular garden is 14 m long and 9 m wide. Grass seed costs £2 for each square metre. How much does it cost to seed the whole garden?

Answer: £252

8 A square floor is made of square tiles. There are 15 tiles along each side. How many tiles are there on the whole floor?

Answer: 225 tiles

9 A baker bakes 6 trays with 24 rolls on each, and 4 trays with 18 rolls on each. How many rolls does the baker bake altogether?

Answer: 216 rolls

10 A theatre has 25 rows with 32 seats in each row. 135 tickets have been sold. How many seats are empty?

Answer: 665 seats

11 Priya says, " $6^2 = 12$." What mistake has Priya made? What is 6^2 ?

Answer: 36. She multiplied 6 by 2.

12 Always, sometimes or never?

- (a) A square number is an even number.

Answer: Sometimes

- (b) The area of a rectangle with whole-number sides is a multiple of each of its sides.

Answer: Always

- 13** Which is the odd one out? Explain how you know. 6^2 4×9 3×13 2×18

Answer: 3×13

- 14** I am thinking of two whole numbers. Their product is 72. Their sum is 17. What are my two numbers?

Answer: 8 and 9

- 15** Challenge! A rectangle has sides that are whole numbers of centimetres. Its area is 60 cm^2 and its perimeter is 32 cm. What are the lengths of its sides?

Answer: 6 cm and 10 cm