

## Year 4: Scaling, correspondence and multiplying three numbers: answers

Year 4 - Short Multiplication and Short Division - Lesson 4.6

**Answers.** Final answers to the worksheet questions. Full step-by-step solutions for every question are free at [websink.site/ks2-sats/maths/year-4/ch04-multiplying-dividing/scaling-correspondence-and-multiplying-three-numbers/](https://websink.site/ks2-sats/maths/year-4/ch04-multiplying-dividing/scaling-correspondence-and-multiplying-three-numbers/)

### Exercise 4F Scaling, correspondence and three numbers Non-calculator

**1** Work out each answer. Use a bar model to help you.

- (a) Ella has 18 stickers. Omar has 5 times as many stickers as Ella. How many stickers does Omar have?

**Answer:** 90 stickers

- (b) A pencil is 17 cm long. A ruler is 3 times as long as the pencil. How long is the ruler?

**Answer:** 51 cm

(c)

A bag of apples weighs 125 g. A melon weighs 4 times as much as the bag. How much does the melon weigh?

**Answer:** 500 g

- (d) A pen costs 45p. A book costs 6 times as much as the pen. How much does the book cost?

**Answer:** 270p

**2** Work out the smaller amount in each problem.

- (a) Dad has 84 stamps. This is 6 times as many as Ben has. How many stamps does Ben have?

**Answer:** 14 stamps

- (b) A tree is 96 m tall. It is 4 times as tall as the shed. How tall is the shed?

**Answer:** 24 m

- (c) A bike costs £192. It costs 4 times as much as a helmet. How much does the helmet cost?

**Answer:** £48

- (d) A lorry carries 135 boxes. This is 5 times as many as a van carries. How many boxes does the van carry?

**Answer:** 27 boxes

**3** Each pair of problems tells the same story. Say whether to multiply or divide, and work out each answer.

- (a) Sam has 8 books. Tia has 6 times as many books as Sam. How many books does Tia have?

**Answer:** 48 books

- (b) Tia has 48 books. This is 6 times as many as Sam has. How many books does Sam have?

**Answer:** 8 books

- (c) Kai has 9 marbles. Jo has 7 times as many marbles as Kai. How many marbles does Jo have?

**Answer:** 63 marbles

- (d) Jo has 63 marbles. This is 7 times as many as Kai has. How many marbles does Kai have?

**Answer:** 9 marbles

#### 4 How many different combinations are there?

- (a) Jamal has 4 T-shirts and 6 pairs of shorts. How many different outfits can he make?

**Answer:** 24 outfits

- (b) A menu has 5 starters and 4 mains. You choose one of each. How many different meals can you make?

**Answer:** 20 meals

- (c)

A cafe has 6 types of bread and 5 fillings. How many different sandwiches can be made with one bread and one filling?

**Answer:** 30 sandwiches

- (d)

A cafe has 7 drinks and 3 cakes. A customer picks one drink and one cake. How many different pairs can they pick?

**Answer:** 21 pairs

#### 5 Three groups of choices.

- (a) Mei has 3 skirts, 4 tops and 2 scarves. She wears one of each. How many different outfits are there?

**Answer:** 24 outfits

- (b)

A restaurant has 2 starters, 5 mains and 4 puddings. How many different three-course meals can you choose?

**Answer:** 40 meals

#### 6 Work out the missing number of choices.

- (a) There are 36 different meals. There are 4 starters. How many mains are there?

**Answer:** 9 mains

- (b)

Priya can make 28 different outfits with a skirt and a top. She has 4 skirts. How many tops does she have?

**Answer:** 7 tops

- (c) A shop makes 45 different ice creams. There are 5 flavours. How many types of cone are there?

**Answer:** 9 cones

#### 7 Multiply three numbers. Look for a pair that is easy to multiply first.

- (a)  $2 \times 5 \times 17 =$

**Answer:** 170

(b)  $4 \times 25 \times 3 =$

**Answer:** 300

(c)  $5 \times 8 \times 7 =$

**Answer:** 280

(d)  $20 \times 5 \times 9 =$

**Answer:** 900

(e)  $2 \times 45 \times 5 =$

**Answer:** 450

(f)  $50 \times 3 \times 2 =$

**Answer:** 300

- 8 A warehouse has 4 boxes. Each box holds 5 packs. Each pack has 20 pencils. How many pencils are there altogether?

**Answer:** 400

- 9 Leo has 7 marbles. Amir has 4 times as many marbles as Leo. Jo has 3 times as many marbles as Amir. How many marbles does Jo have?

**Answer:** 84 marbles

- 10 Ali picks 35 apples. His dad picks 4 times as many apples as Ali. How many apples do they pick altogether?

**Answer:** 175 apples

- 11 Aisha has 8 sweets. Ben has 5 more sweets than Aisha. Cara has 5 times as many sweets as Aisha. Who has more sweets, Ben or Cara? Explain how you know.

**Answer:** Cara (40 sweets, Ben has 13)

- 12 Always, sometimes or never? Adding 4 to a whole number gives a bigger answer than multiplying the number by 4.

**Answer:** Sometimes

- 13 Priya has 3 hats and 5 tops, so she can make 15 outfits. She buys 1 more hat. How many more outfits can she make?

**Answer:** 5 more outfits

- 14 Which two problems can be solved with  $3 \times 5$ ? Tick **two** boxes.

A 3 hats and 5 tops. How many outfits?

B Sam has 5 stickers. Tom has 3 more. How many does Tom have?

C Ali has 5 books. Bea has 3 times as many. How many does Bea have?

D 15 sweets are shared between 3 children. How many does each child get?

**Answer:** A and C

- 15 A menu has 3 starters, some main courses and 2 puddings. There are 30 different three-course meals. How many main courses are there?

**Answer:** 5 main courses

