

Year 5: What do we do with the remainder?: answers

Year 5 - Short Division and Remainders - Lesson 5.5

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/ch05-division/what-do-we-do-with-the-remainder/

Exercise 5E Remainders Non-calculator

1 Work out each division. Write each answer with a remainder.

(a) $45 \div 6 =$

Answer: 7 r 3

(b) $100 \div 7 =$

Answer: 14 r 2

(c) $250 \div 8 =$

Answer: 31 r 2

2 Work out each answer. You will need to round up.

(a) 53 children go on a trip. A minibus holds 8 children. How many minibuses are needed?

Answer: 7 minibuses

(b) Dan has to carry 130 books. His bag holds 9 books. How many trips does he need to make?

Answer: 15 trips

(c) 37 people each need a seat. A table seats 4 people. How many tables are needed?

Answer: 10 tables

3 Work out each answer. You will need to round down.

(a) Aisha has 70p. Sweets cost 8p each. How many sweets can she buy?

Answer: 8 sweets

(b) A ribbon is 100 cm long. Each gift needs 7 cm of ribbon. How many gifts can be wrapped?

Answer: 14 gifts

(c) A baker has 150 cakes. A box holds 4 cakes. How many full boxes can she make?

Answer: 37 boxes

4 Work out each answer. The answer is the remainder.

(a) 58 apples are shared equally between 7 baskets. How many apples are left over?

Answer: 2 apples

(b) 100 cards are dealt equally to 9 players. How many cards are left over?

Answer: 1 card

- (c) Mei has 200 beads. She makes necklaces with 6 beads each. How many beads are left over?

Answer: 2 beads

5 Read each question carefully. Round up, round down or use the remainder, then answer.

- (a) A strip of card is 75 cm long. Strips of 4 cm are cut from it. How many whole strips can be cut?

Answer: 18 strips

(b)

75 pupils take part in a game. Each team has 4 players. How many teams are needed so that everyone can play?

Answer: 19 teams

- (c) 75 pupils are put into teams of 4. How many pupils are not in a full team?

Answer: 3 pupils

- (d) Stickers are sold on sheets of 5. Ben needs 206 stickers. How many sheets must he buy?

Answer: 42 sheets

6 Write each answer as a remainder, as a fraction (or mixed number) and as a decimal.

- (a) $9 \div 2 =$

Answer: $4 \text{ r } 1 = 4\frac{1}{2} = 4.5$

- (b) $13 \div 5 =$

Answer: $2 \text{ r } 3 = 2\frac{3}{5} = 2.6$

- (c) $3 \div 4 =$

Answer: $0 \text{ r } 3 = \frac{3}{4} = 0.75$

7 Share the money equally. Write each answer in pounds and pence.

- (a) £15 is shared equally between 4 friends. How much does each friend get?

Answer: £3.75

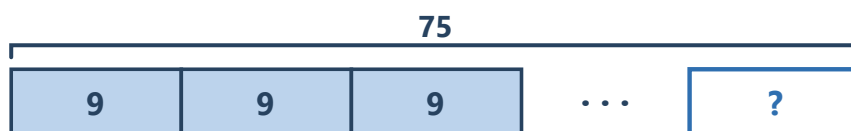
- (b) Two sisters share £7 equally. How much does each sister get?

Answer: £3.50

- (c) £18 is shared equally between 8 children. How much does each child get?

Answer: £2.25

8 A ribbon is 75 cm long. It is cut into pieces of 9 cm for bows.



- (a) Work out $75 \div 9$. Write the answer with a remainder.

Answer: 8 r 3

- (b) How many whole bows can be made?

Answer: 8 bows

- (c) How long is the piece that is left?

Answer: 3 cm

- 9 150 people are going to a wedding. Each taxi takes 7 people. How many taxis are needed?

Answer: 22 taxis

- 10 A teacher has 200 pencils. She shares them equally between 9 groups.

- (a) How many pencils does each group get?

Answer: 22

- (b) How many pencils are left over?

Answer: 2

- 11 Dev cuts a 5 metre rope into 2 equal pieces. How long is each piece, in metres? Give your answer as a remainder, as a mixed number and as a decimal.

Answer: $2 \text{ r } 1 = 2\frac{1}{2} = 2.5$

- 12 There are 100 eggs. Each box holds 6 eggs. Zoe says, " $100 \div 6 = 16 \text{ r } 4$, so 16 boxes are needed." What mistake has Zoe made? What is the correct answer?

Answer: 17 boxes. The 4 left over eggs still need a box.

- 13 Do you round up, round down or use the remainder? Write your decision for each question and say why.

- (a) A coach holds 50 passengers. How many coaches are **needed** for 230 passengers?

Answer: Round up

- (b) Hana has £20. Each pack of pens costs £3. How many packs can she **buy**?

Answer: Round down

- (c) There are 47 sweets shared between 5 children. How many are **left over**?

Answer: Use the remainder

- (d) A bus takes 40 children. There are 130 children. How many buses are **needed**?

Answer: Round up

- 14 Always, sometimes or never?

- (a) A number that leaves a remainder of 3 when divided by 5 is odd.

Answer: Sometimes

- (b) A number that leaves a remainder of 1 when divided by 2 is odd.

Answer: Always

- 15 Challenge! I am thinking of a number between 50 and 100. When I divide it by 8 the remainder is 3. When I divide it by 5 the remainder is 2. What is my number?

Answer: 67

