Long division word problems: the remainder

Year 6. Divide, then decide: round up, round down, give the remainder, or write it as a fraction or decimal.

Name: _____ Date: _____

1. A minibus holds 20 children. 395 children are going on a school trip. How many minibuses are needed?

Answer: _____

2. Eggs are packed in boxes of 12. How many boxes can be filled completely with 833 eggs?

Answer: _____

3. 617 stickers are shared equally between 23 children. How many stickers are left over?

Answer: _____

4. 190 metres of ribbon is cut into 12 equal pieces. How long is each piece? Give your answer as a mixed number.

Answer: _____

5. £415 is shared equally between 4 friends. How much money does each friend get?

Answer: _____

6. Chairs for a school concert are set out in rows of 24. How many rows are needed so that 356 people can sit down?

Answer: _____

Answer key: long division word problems

The calculation, the decision about the remainder, and the answer.

1. 20 minibuses

395 ÷ 20 = 19 r 15. 19 minibuses would leave 15 children behind, so round up: 20 minibuses.

2. 69 boxes

833 ÷ 12 = 69 r 5. Only full boxes count, so round down: 69 boxes (5 eggs are left over).

3. 19 stickers

617 ÷ 23 = 26 r 19. Each child gets 26 stickers and the remainder, 19, is left over.

4. 15 5/6 metres

190 ÷ 12 = 15 r 10. The remainder 10 is shared too, so it becomes 10/12 = 5/6. Each piece is 15 5/6 m.

5. £103.75

415 ÷ 4 = 103 r 3. Money can be split into pence, so keep dividing after the decimal point: £103.75 each.

6. 15 rows

356 ÷ 24 = 14 r 20. 14 rows seat 336 people, so one more row is needed for the other 20: 15 rows.