

Max's Division Discovery Cards

Learning objective: To recall and use division facts for the 3, 4, 6, 8, 11 and 12 multiplication tables and solve problems involving division with remainders.

Read the division challenge on the front of the card. Think carefully about your times tables to find the answer. Check your work by multiplying the quotient by the divisor.

What is the definition of a 'dividend' in a division calculation?

The dividend is the total number you are starting with before you divide it into equal groups.

Max has 48 acorns to share equally among 4 squirrels. How many acorns does each squirrel receive?

12 acorns.

Calculate: $72 \div 8$

9

What is the remainder when you calculate $26 \div 5$?

The remainder is 1.

If $11 \times 6 = 66$, what is the inverse division fact?

$66 \div 11 = 6$ or $66 \div 6 = 11$.

Max is organising 36 pebbles into rows of 3. How many rows will he have?

12 rows.

Explain why the answer to $0 \div 9$ is 0.

Because if you have zero items and you share them into nine groups, each group still contains zero items.

Compare and contrast: How is dividing 40 by 4 different from dividing 40 by 8?

Dividing by 4 results in a larger quotient (10) because you are splitting the total into fewer groups, whereas dividing by 8 results in a smaller quotient (5).

Justify your answer: Is 96 divisible by 8? Show your reasoning.

Yes, because $8 \times 10 = 80$ and $8 \times 2 = 16$. $80 + 16 = 96$, so $96 \div 8 = 12$.

What might happen if you try to divide 25 by 4? Describe the result using the term 'remainder'.

You would have 6 groups of 4 with a remainder of 1 left over.

If a store sells a set of 12 pencils for £4.80, how much does one pencil cost?

£0.40 (40p).

Challenge: Max has 100 marbles. He shares them equally among 8 friends. How many marbles does each friend get, and how many are left over?

Each friend gets 12 marbles, and there are 4 marbles left over.