Division strategies

6 questions | 11 marks

Equivalent correct methods earn the corresponding marks.

1. Calculate $168 \div 4$. [1 mark]

$160 \div 4 = 40$ and $8 \div 4 = 2$.

Answer: 42.

2. Calculate $315 \div 5$. [1 mark]

$300 \div 5 = 60$ and $15 \div 5 = 3$.

Answer: 63.

3. Calculate $456 \div 6$ using partial quotients. [2 marks]

$420 \div 6 = 70$ and $36 \div 6 = 6$.

Answer: 76.

4. A library packs 288 books equally into eight boxes. How many books are in each box? [2 marks]

$240 \div 8 = 30$ and $48 \div 8 = 6$.

There are thirty-six books per box.

Answer: 36 books.

5. Calculate $624 \div 12$ using known multiples of twelve. [2 marks]

$12 \times 50 = 600$, leaving twenty-four.

$12 \times 2 = 24$, so the quotient is fifty-two.

Answer: 52.

6. Zoe says $294 \div 7 = 41$. Use multiplication to check the claim and then correct it. [3 marks]

There are seven more in 294, so one more group of seven is needed.

$42 \times 7 = 294$.

Answer: $41 \times 7 = 287$, not 294. The correct quotient is 42.