

Max's Mental Maths Challenge: Greater Depth Edition

Learning objective: To develop fluency and accuracy in mental calculation strategies, including partitioning, adjusting, and applying inverse operations to multi-step problems.

Use these flashcards to test your mental agility. For each card, calculate the answer in your head before checking the solution. Can you find more than one way to solve the trickier problems?

Calculate $4,500 + 3,800$ using a mental partitioning strategy.

8,300 ($4,000 + 3,000 = 7,000$; $500 + 800 = 1,300$; $7,000 + 1,300 = 8,300$)

Subtract 2,999 from 5,600 mentally by adjusting.

2,601 (Subtract 3,000 to get 2,600, then add 1 back because you subtracted too much)

What is 15×12 ? Use the strategy of multiplying by 10 and then by 2.

180 ($15 \times 10 = 150$; $15 \times 2 = 30$; $150 + 30 = 180$)

Max has £15.50. He spends £7.75. How much change does he receive?

£7.75

If $45 \times 8 = 360$, what is 45×16 ?

720 (Since 16 is double 8, the product must be doubled)

Find the missing number: $850 + ? = 1,200$.

350

Calculate $64 \div 4$ mentally.

16

What is the inverse of $1,250 - 450 = 800$?

$800 + 450 = 1,250$

Multiply 0.7 by 100.

70

Max buys three notebooks at £2.40 each. What is the total cost?

£7.20

Divide 480 by 8.

60

Estimate 49×21 by rounding to the nearest ten.

1,000 ($50 \times 20 = 1,000$)