

Multiplication TO x TO using partitioning

Use partitioning to calculate TO x TO
Estimate and check the answer to a calculation



- | | | | |
|------------------|------------------|------------------|------------------|
| 1 a 7×3 | 2 a 6×8 | 3 a 9×4 | 4 a 6×6 |
| b 70×3 | b 60×8 | b 90×4 | b 6×60 |
| c 70×30 | c 60×80 | c 90×40 | c 60×60 |
| 5 a 8×7 | 6 a 3×8 | 7 a 7×5 | 8 a 9×8 |
| b 80×7 | b 3×80 | b 70×5 | b 9×80 |
| c 80×70 | c 30×80 | c 70×50 | c 90×80 |

Example

$$63 \times 38 \rightarrow 60 \times 40 = 2400$$

$$63 \times 38 = (63 \times 30) + (63 \times 8)$$

$$= 1890 + 504$$

$$= 2394$$

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|------------------|------------------|------------------|
| a 46×42 | b 38×33 | c 84×56 |
| d 48×65 | e 26×39 | f 74×58 |
| g 78×46 | h 61×78 | i 85×92 |
| j 35×24 | k 68×37 | l 54×26 |
| m 72×38 | n 66×66 | o 88×88 |



- 2 Look carefully at the numbers in the calculations in Question 1. Find three calculations that could be worked out using a different strategy. Find the answer using your chosen strategy. Explain why you chose your method.

Challenge 3

- 1 Using each of the four number cards only once, make a TO x TO calculation that gives an answer as close as possible to the answer shown in the circle.

Example

4 5 3 8 5000

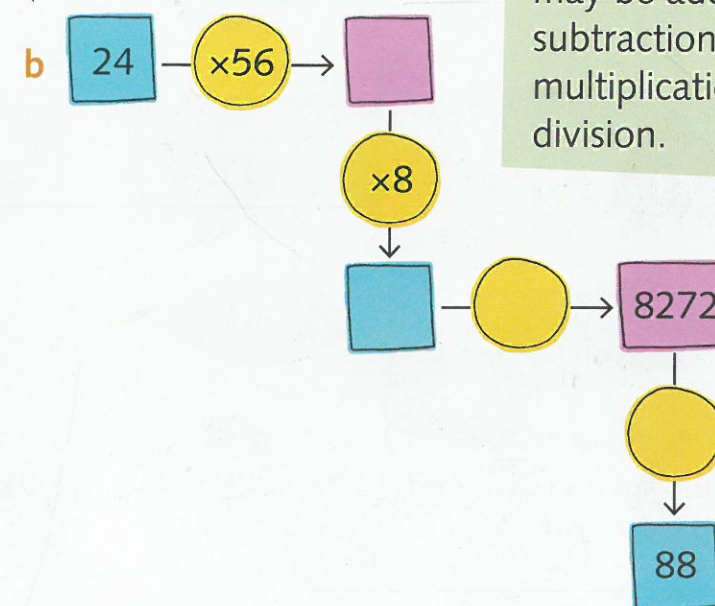
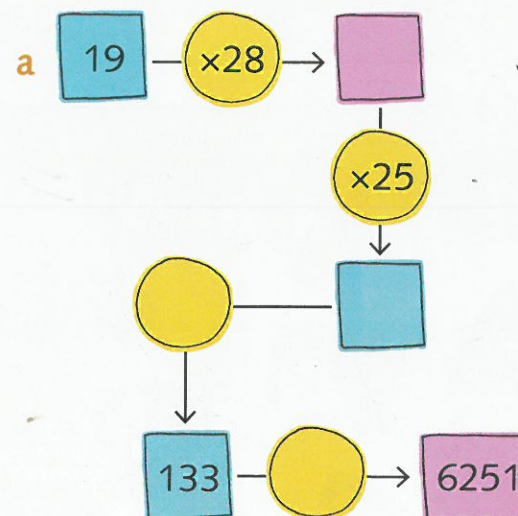
$$84 \times 53 = (84 \times 50) + (84 \times 3)$$

$$= 4200 + 252$$

$$= 4452$$

- | | |
|----------------|----------------|
| a 2 3 5 7 1000 | b 2 3 7 9 3000 |
| c 1 3 5 6 1000 | d 3 4 5 6 2000 |
| e 2 4 7 9 4000 | f 1 3 6 9 1000 |
| g 4 6 7 8 6000 | h 7 8 9 0 6000 |

- 2 Copy these number machines. Write the missing numbers and decide which operations to use.



Hint

An operation may be addition, subtraction, multiplication or division.

