

Multiplication TO x TO using partitioning and the grid method



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

Work out the answer to each calculation mentally.

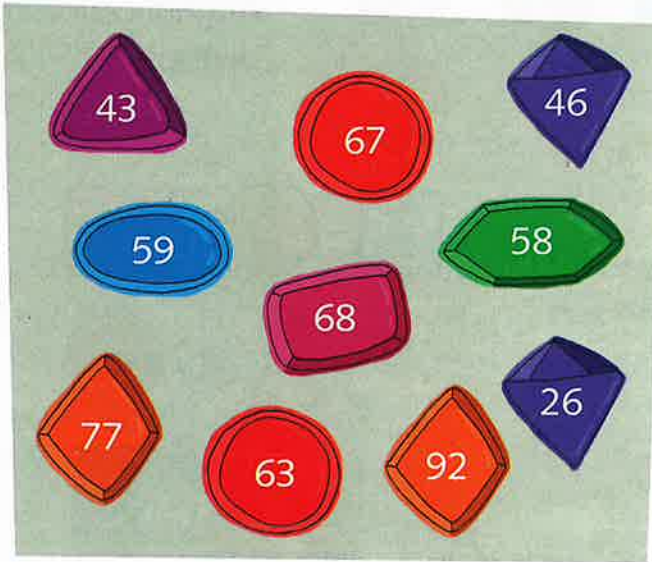
- a 6×7
- b 50×8
- c 60×8
- d 9×6
- e 80×9
- f 80×40
- g 3×8
- h 50×50
- i 30×70
- j 40×30
- k 40×9
- l 70×8
- m 7×9
- n 60×6
- o 7×8
- p 90×70

1 Choose a number from each box and create a multiplication calculation. Estimate the answer first. Multiply the numbers together using the grid method. Choose different numbers each time. Write at least eight calculations.

Example

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

x	60	3	
30	1800	90	1890
8	480	24	+ 504
			<u>2394</u>



- 2 Find the answers to these problems about three weeks in a jewellery shop.
- a Week 1: A jeweller has a sales target for sapphire earrings of £2500 for the week. One pair of earrings costs £84. If the jeweller sells 23 pairs of earrings in that week, how close is he to reaching the target?
 - b Week 2: In Week 2 the sales target is increased by 10%. The jeweller sells 15 more pairs of sapphire earrings than the previous week. What is the difference between the target set and the actual sales?
 - c Week 3: Ruby earrings cost $\frac{1}{3}$ less than sapphire earrings. In Week 3 the jeweller sells the same number of ruby earrings as he sold sapphire earrings in Weeks 1 and 2. How much money is taken on ruby earrings?

Hint

Use the information in each problem to find the answer to the next problem.



Challenge 3

1 Find the missing digit or digits in each calculation.

- a $19 \times 3 \diamond = 665$
- b $3 \bullet \times 18 = 594$
- c $24 \times 6 \heartsuit = 1632$
- d $27 \times \blacktriangle 6 = 1512$
- e $\heartsuit 6 \times 58 = 2668$
- f $3 \circ \times 42 = 1512$
- g $46 \times \blacklozenge 5 = 1150$
- h $39 \times \heartsuit \blacklozenge = 2145$
- i $48 \times \circ 7 = 2736$
- j $30 \times 5 \heartsuit = 1530$
- k $65 \times \bullet 8 = 1820$
- l $83 \times 3 \diamond = 2905$
- m $29 \times \diamond \heartsuit = 1160$
- n $99 \times \bullet \blacktriangle = 9801$

2 Write two different TO x TO calculations that give an answer of:

- a 1000
- b 816
- c 736
- d 1650
- e 924
- f 700

