

Write the correct answer.

- 1 Write the multiplication sentence that is represented by the area model.

	50	8
70	3,500	560
4	200	32

Use the form:
factor × factor = product

$58 \times 74 = 4,292$

- 2 Fill in the missing numbers in the area model. Write the multiplication sentence represented by the model.

	300	10	6
40	12,000	400	240
8	2,400	80	48

$316 \times 48 = 15,168$

- 3 Write a multiplication sentence that meets these conditions:
- The product is between 5,000 and 5,500.
 - Each factor is between 70 and 80 and is an even number.
 - Neither factor has a zero in the ones place.

Possible answers:

$72 \times 72 \times 5,184; 72 \times 74 =$

$5,328; 72 \times 76 = 5,472$

- 4 Complete the multiplication puzzle and write the product.

×	60	2	62
90	5,400	180	5,580
7	420	14	434
97	5,820	194	6,014

For 5–6, use the multiplication puzzle.

×	19
60	E
3	F
63	G

- 5 Write the values for partial products E and F.

E = $1,140$

F = 57

- 6 Write the value of the product G.

$1,197$

- 7 Write the record that represents the completed multiplication puzzle.

×	400	20	1	421	
20					421×20
6					421×6
26				■	

$$\begin{array}{r}
 421 \\
 \times 26 \\
 \hline
 8420 \leftarrow 421 \times 20 \\
 2526 \leftarrow 421 \times 6 \\
 \hline
 10,946
 \end{array}$$

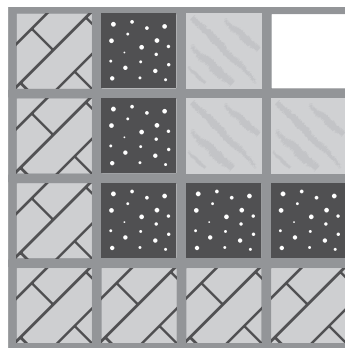
- 8 What is the value of A in the multiplication sentence if $x = 45$?

$$(x + A)(x - A) = 2,009$$

$A = 4$ because

$49 \times 41 = 2,009$

For 9–10 use the pattern below. Each group of differently marked small square tiles forms a section of a wall.



- 9 If the pattern is continued, how many square tiles will be needed for the tenth section?

19

- 10 Complete the expression for T , the number of square tiles that are needed for the n th section.

$$T = 2n - \underline{\mathbf{1}}$$