

# Multiplying by Tens

Write and complete multiplication sentences for each array of quarters. Write as many as you can.



$100 \times 6 = \underline{600}$

$150 \times 4 = \underline{\hspace{2cm}}$

$4 \times 6 = \underline{\hspace{2cm}}$

$24 \times 25 = \underline{\hspace{2cm}}$



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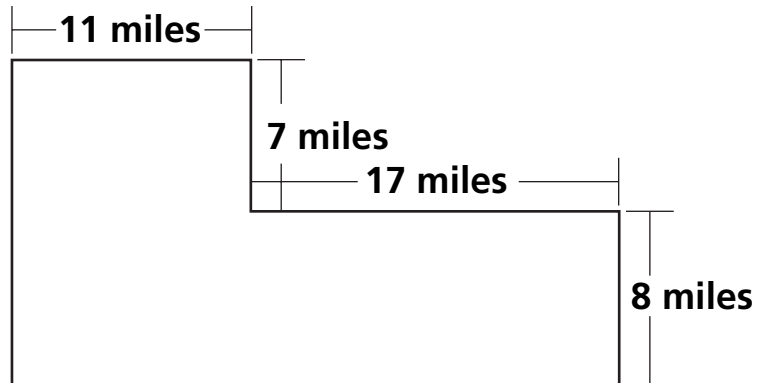
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## Separating Large Arrays

Find the area of this **L-shaped field**.  
Use pictures, words, or numbers to show your solution.



# Making a Vertical Record

Find the product.

$$\begin{array}{r} 18 \\ \times 18 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \\ \times 17 \\ \hline \end{array}$$

$$\begin{array}{r} 23 \\ \times 23 \\ \hline \end{array}$$

$$\begin{array}{r} 24 \\ \times 22 \\ \hline \end{array}$$

$$\begin{array}{r} 36 \\ \times 36 \\ \hline \end{array}$$

$$\begin{array}{r} 37 \\ \times 35 \\ \hline \end{array}$$

$$\begin{array}{r} 47 \\ \times 47 \\ \hline \end{array}$$

$$\begin{array}{r} 48 \\ \times 46 \\ \hline \end{array}$$

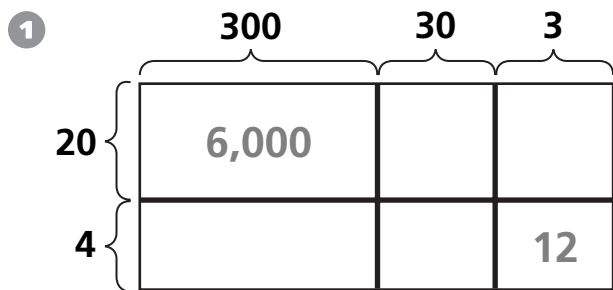
**Solve.**

5 Which product is larger?  $149 \times 151$  or  $150 \times 150$

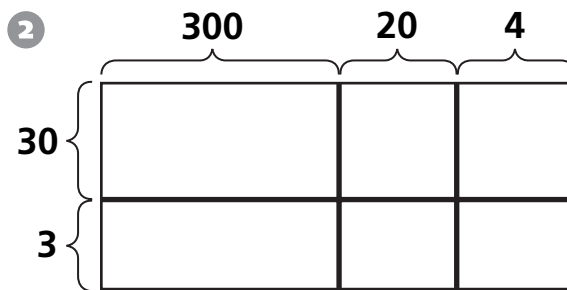
Show how you know with words, numbers, or pictures.

# Multiplying Three-Digit Numbers

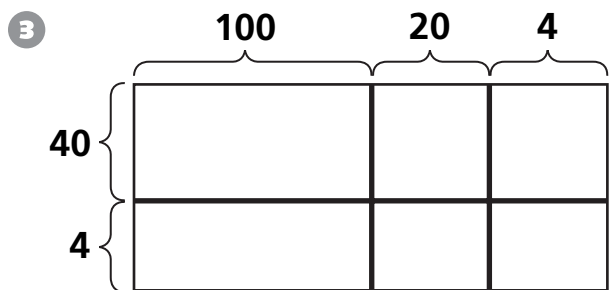
Use the diagram to help you find the product.



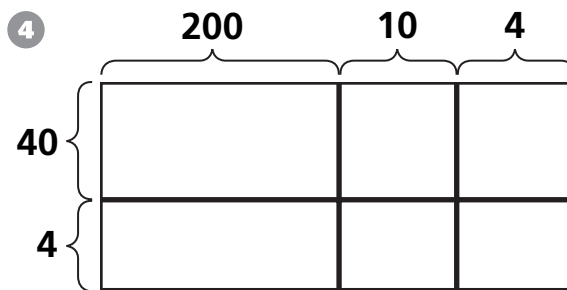
$333 \times 24 = \underline{\hspace{2cm}}$



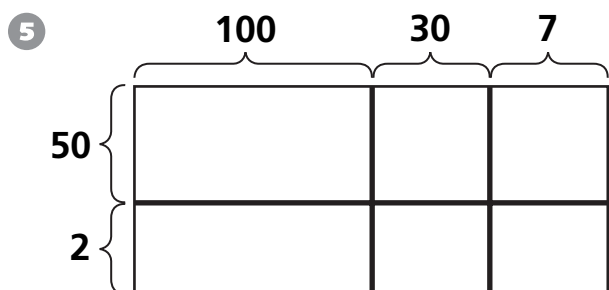
$324 \times 33 = \underline{\hspace{2cm}}$



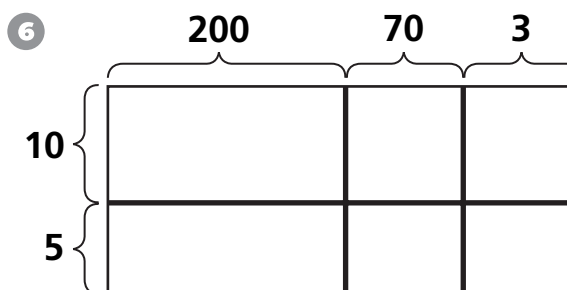
$44 \times 124 = \underline{\hspace{2cm}}$



$44 \times 214 = \underline{\hspace{2cm}}$



$137 \times 52 = \underline{\hspace{2cm}}$



$15 \times 273 = \underline{\hspace{2cm}}$

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# Multiplication and Division Situations

Max had 132 square tiles. Each tile had an area of 1 square foot. He used the tiles to make the floor of a rectangular patio, so that he would use the least amount of fencing to go around it. What is the length and width of Max's patio?

Use the space below to show how you solved the problem.

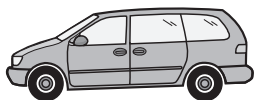
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# Using Arrays for Division

**There are 126 children going on a field trip.**

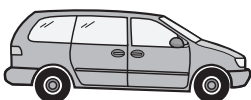
- 1 Each van can hold 7 children.  
How many vans do they need?

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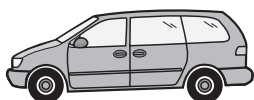
- 2 But wait! These kids are not old enough to ride in the front seat. Only 6 children can ride in each van. How many vans do they need?

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- 3 The teachers consider using larger vans that can hold 9 children. How many vans of this size will they need?

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- 4 The teachers decide to use buses. Each bus can hold 48 children. How many buses do they need, and how many empty seats will there be?

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# Solving Division Puzzles

For each division problem, create and solve a division puzzle using only whole numbers, if possible.

Cross out any problems which cannot be solved with only whole numbers.

For Example:  $144 \div 7$  cannot be solved with only whole numbers because  
 $20 \times 7 = 140$  and  $21 \times 7 = 147$ .

①  $144 \div 2 = \square$

$\square + \square$

$\square + \square$

2  $\square + \square$

②  $144 \div 3 = \square$

$\square + \square$

$\square + \square$

3  $\square + \square$

③  $144 \div 4 = \square$

$\square + \square$

$\square + \square$

4  $\square + \square$

④  $144 \div 5 = \square$

$\square + \square$

$\square + \square$

5  $\square + \square$

⑤  $144 \div 6 = \square$

$\square + \square$

$\square + \square$

6  $\square + \square$

⑥ Find more puzzles for 144.

## Division with Remainders

**Remember that the Marble Club has 185 marbles, and 7 official members.**

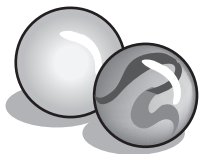
- 1 One day, the marbles are shared evenly and there are none left. How many members are at the meeting?



- 2 Each member gets more than 28 marbles but fewer than 33. How many members are at the meeting?



- 3 A new member joins the club and contributes 38 marbles to the club's collection. All members attend the welcome meeting. How many marbles are left over after they are shared evenly?



- 4 With the new marble collection, how many members are at a meeting when there are 6 marbles left over?

