

Name: \_\_\_\_\_

Date: \_\_\_\_\_

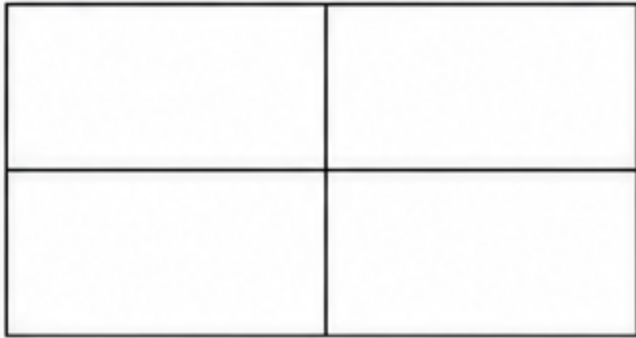
# Multiplication Arrays and Area Models

Draw and solve multiplication problems using arrays and area models to show two-digit by two-digit multiplication.

1 Draw an array for each multiplication. Then write the multiplication sentence.

|                                                                                                                                                |                                                                                                                                                 |                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>a. <math>23 \times 14</math></p> <div></div> <p>_____</p> | <p>b. <math>37 \times 12</math></p> <div></div> <p>_____</p> | <p>c. <math>28 \times 26</math></p> <div></div> <p>_____</p> |
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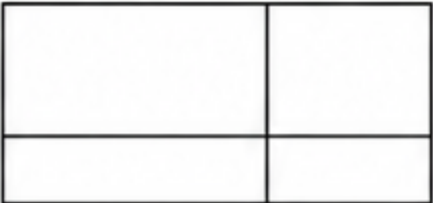
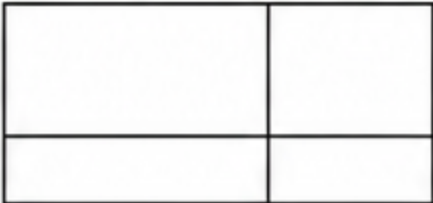
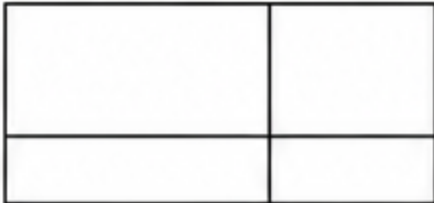
2 Use an area model to solve each multiplication.

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>a. <math>23 \times 17</math></p> <div><div><div>_____</div><div><math>\times</math></div><div>_____</div></div><div><div>_____ + _____</div><div></div></div></div> <p><math>23 \times 17 =</math> _____</p> | <p>b. <math>34 \times 28</math></p> <div><div><div>_____</div><div><math>\times</math></div><div>_____</div></div><div><div>_____ + _____</div><div></div></div></div> <p><math>34 \times 28 =</math> _____</p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

3 Draw an area model to solve these multiplication problems.

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>a. <math>16 \times 29</math></p> <div></div> <p><math>16 \times 29 =</math> _____</p> | <p>b. <math>45 \times 32</math></p> <div></div> <p><math>45 \times 32 =</math> _____</p> | <p>c. <math>27 \times 38</math></p> <div></div> <p><math>27 \times 38 =</math> _____</p> |
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4 Write a two-digit multiplication for each area model shown.

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>a.</p> <div><div><div>20</div><div>7</div></div><div><div>30</div><div>8</div></div><div></div></div> <p>_____ <math>\times</math> _____ = _____</p> | <p>b.</p> <div><div><div>40</div><div>6</div></div><div><div>20</div><div>5</div></div><div></div></div> <p>_____ <math>\times</math> _____ = _____</p> | <p>c.</p> <div><div><div>30</div><div>4</div></div><div><div>10</div><div>9</div></div><div></div></div> <p>_____ <math>\times</math> _____ = _____</p> |
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