

Math 3

1-2 Multiplication Using Array Model

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| **Name:** |  | **Date:** |  |

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| **Common Core Standards** | [CCSS.MATH.CONTENT.3.OA.A.1](http://www.corestandards.org/Math/Content/3/OA/A/1/)  Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. *For example, describe a context in which a total number of objects can be expressed as 5 × 7.*  [CCSS.MATH.CONTENT.3.OA.A.3](http://www.corestandards.org/Math/Content/3/OA/A/3/)  Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. |

1-2 Multiplication Using Array Model

**Array Model**

Identify:

What do you call the red vertical lines?

Answer: Columns

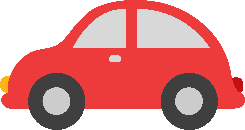
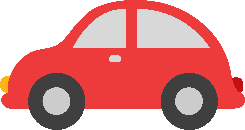
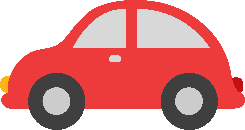
What do you call the blue horizontal lines?

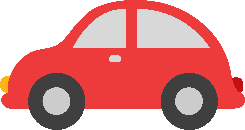
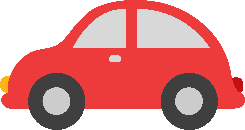
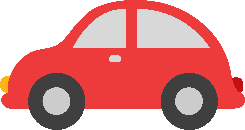
Answer: Rows

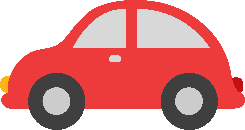
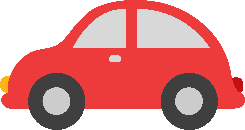
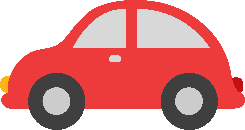
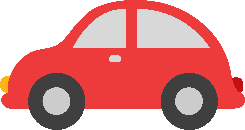
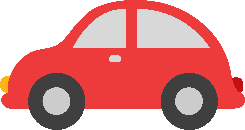
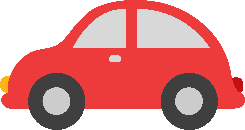
**Multiplication Using Array Model**

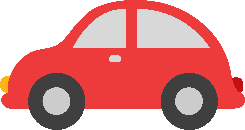
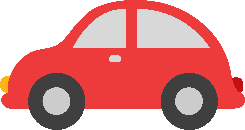
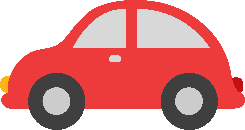
Situation:

Jimmy wants to place 5 of his toy cars in 3 rows.









Write the expression to represent the array above:

**\_ x \_**

How many toy cars does he have?

Part A: Create an expression for the following array models

|  |  |  |  |  |  |
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x

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x

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x

Part B: Draw an array to represent the following statements. Identify the product.

1. 5 rows of 7 =

2. 3 rows of 4 =

3. 6 rows of 8 =

Part C: Odd Man Out

Cross out the item that does not fit the classification of the group in each row.

1.

**16**

**4 by 4**

**4 rows of 5**

2.

**7 x 3**

**7 rows of 3**

**22**

3.

**18**

**8 rows of 2**

**9 rows of 2**

4.

**3 x 4**

**3 by 4**

**4 x 4**

5.

**32**

**5 rows of 8**

**4 by 5**

6.

**5 x 3**

**25**

**5 by 5**

7.

**19**

**4 rows of 5**

**20**

**42**

**6 x 8**

**7 by 6**

8.

**45**

**5 rows of 9**

**8 by 5**

9.

**7 rows of 7**

**7 rows of 8**

**49**

10.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **ANSWER KEY** | | |
|  | **Situation 1** | **5 x 3**  **15 toy cars** | |
|  | **Part A:** | **1. 3 x 6**  **2. 5 x 8**  **3. 4 x 9** | |
|  | **Part B:** |  | |
|  | **1.**  **= 35** |  | |
|  | **2.**  **= 12** |  | |
|  | **3.**  **= 48** |  | |
|  | **Part C:** | |  | |
|  | **1.** | | **4 rows of 5** | |
|  | **2.** | | **22** | |
|  | **3.** | | **8 rows of 2** | |
|  | **4.** | | **4 x 4** | |
|  | **5.** | | **5 row of 8** | |
|  | **6.** | | **5 x 3** | |
|  | **7.** | | **19** | |
|  | **8.** | | **6 x 8** | |
|  | **9.** | | **8 by 5** | |
|  | **10.** | | **7 rows of 8** | |