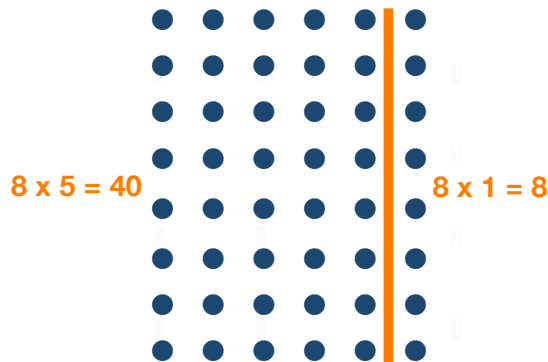




Split the array into two parts showing multiplication facts you know. Explain how you can use those facts to find the answer.

There are many ways to split an array. The following solutions show one way to think about each problem.

1.  $8 \times 6 = 48$



$8 \times 5 = 40$

$8 \times 1 = 8$

$40 + 8 = 48$ , so  $8 \times 6 = 48$

2.  $4 \times 6 = 24$

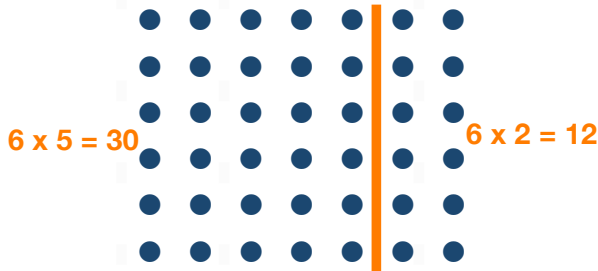


$2 \times 6 = 12$

$2 \times 6 = 12$

$12 + 12 = 24$ , so  $4 \times 6 = 24$

3.  $6 \times 7 = 42$

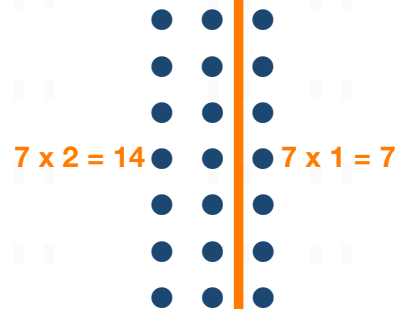


$6 \times 5 = 30$

$6 \times 2 = 12$

$30 + 12 = 42$ , so  $6 \times 7 = 42$

4.  $7 \times 3 = 21$

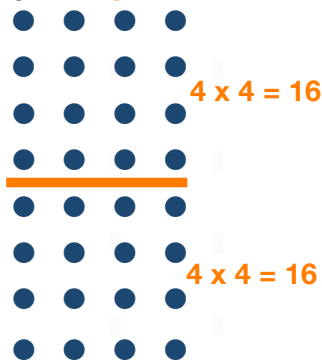


$7 \times 2 = 14$

$7 \times 1 = 7$

$14 + 7 = 21$ , so  $7 \times 3 = 21$

5.  $8 \times 4 = 32$

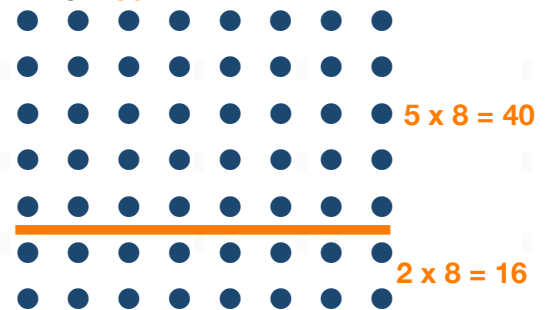


$4 \times 4 = 16$

$4 \times 4 = 16$

$16 + 16 = 32$ , so  $8 \times 4 = 32$

6.  $7 \times 8 = 56$



$5 \times 8 = 40$

$2 \times 8 = 16$

$40 + 16 = 56$ , so  $7 \times 8 = 56$

Use mental math to solve the following problems. Describe how you can use facts you know to help you solve the problems.

7. A child's admission to the community swimming pool is \$3. How much would it cost for Anna and 5 of her friends to go swimming?  
 To solve this problem, multiply  $6 \times 3$ .  
**Possible Thinking:**  $6 \times 3$  is the same as  $5 \times 3$  plus  $1 \times 3$ , which equals  $15 + 3$ .  
 It will cost \$18 for the group to go swimming.
  
8. Mario watches four hours of TV every day. How many hours of TV will he watch in a week?  
 To solve this problem, multiply  $7 \times 4$ .  
**Possible Thinking:**  $7 \times 4$  is the same as  $7 \times 2$  plus  $7 \times 2$ , which equals  $14 + 14$ .  
 Mario watches 28 hours of TV in a week.
  
9. If Mario sleeps eight hours every day, how many hours does he sleep in a week?  
 To solve this problem, multiply  $7 \times 8$ .  
**Possible Thinking:**  $7 \times 8$  is the same as  $5 \times 8$  plus  $2 \times 8$ , which is  $40 + 16$ .  
 Mario sleeps 56 hours a week.
  
10. Pizza Palace has three kinds of crusts: thin, thick, and stuffed. They have 8 different pizza toppings: sausage, pepperoni, ham, mushrooms, green peppers, onions, black olives, and green olives. How many different one-topping pizzas could be ordered at Pizza Palace?  
 There are 8 different toppings that could be ordered for each of the three kinds of crusts. To solve this problem, multiply  $3 \times 8$ .  
**Possible Thinking:**  $3 \times 8$  is the same as  $2 \times 8$  plus  $1 \times 8$ , which is  $16 + 8$ .  
 There are 24 different one-topping pizzas that could be ordered.
  
11. Claudia started a seashell collection on her summer vacation. She collected 6 seashells when she went to Florida this summer. Her cousin, Lacey, has seven times as many seashells in her collection. How many seashells does Lacey have?  
 To solve this problem, multiply  $7 \times 6$ .  
**Possible Thinking:**  $7 \times 6$  is the same as  $7 \times 3$  plus  $7 \times 3$ , which is  $21 + 21$ .  
 Lacey has 42 seashells.
  
12. Blaine loves to read and just got a set of three novels. Each novel has 12 chapters. How many chapters are in the three novels?  
 To solve this problem, multiply  $3 \times 12$ .  
**Possible Thinking:**  $3 \times 12$  is the same as  $3 \times 10$  plus  $3 \times 2$ , which is  $30 + 6$ .  
 There are 36 chapters in the three novels.