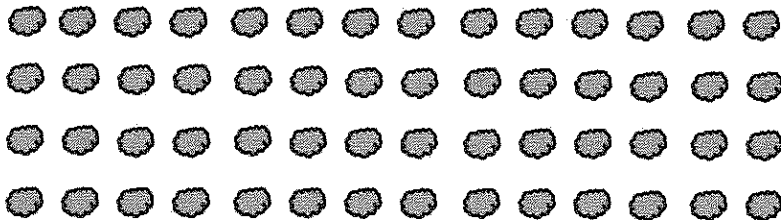


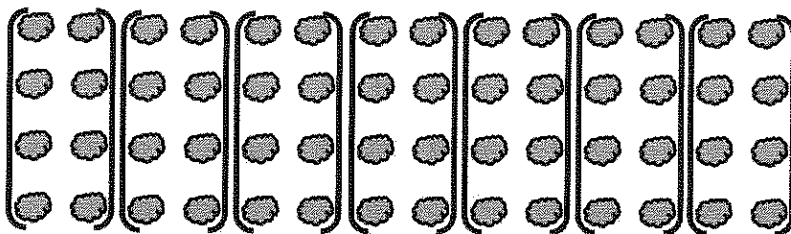
## G3-M3-Lesson 9

1. Use the array to complete the equation.



a.  $4 \times 14 = \underline{56}$

I can use the array to skip-count by 4 to find the product.



The array shows that there are 7 groups of  $4 \times 2$ .

b.  $(4 \times \underline{2}) \times 7$   
 $= \underline{8} \times \underline{7}$   
 $= \underline{56}$

I rewrote 14 as  $2 \times 7$ . Then I moved the parentheses to make the equation  $(4 \times 2) \times 7$ . I can multiply  $4 \times 2$  to get 8. Then I can multiply  $8 \times 7$  to get 56. Rewriting 14 as  $2 \times 7$  made the problem easier to solve!

2. Place parentheses in the equations to simplify and solve.

$$\left. \begin{aligned} 3 \times 21 &= 3 \times (3 \times 7) \\ &= (3 \times 3) \times 7 \\ &= \underline{9} \times 7 \end{aligned} \right\} = \underline{63}$$

I can put the parentheses around  $3 \times 3$  and then multiply.  $3 \times 3$  equals 9. Now I can solve the easier multiplication fact,  $9 \times 7$ .

3. Solve. Then, match the related facts.

a.  $24 \times 3 = \underline{72} =$    $9 \times (3 \times 2)$

b.  $27 \times 2 = \underline{54} =$    $8 \times (3 \times 3)$

I can think of 27 as  $9 \times 3$ . Then, I can move the parentheses to make the new expression  $9 \times (3 \times 2)$ .  $3 \times 2 = 6$ , and  $9 \times 6 = 54$ , so  $27 \times 2 = 54$ .

I can think of 24 as  $8 \times 3$ . Then, I can move the parentheses to make the new expression  $8 \times (3 \times 3)$ .  $3 \times 3 = 9$ , and  $8 \times 9 = 72$ , so  $24 \times 3 = 72$ .