

Lesson 6-14 • Group 2

Reinforce Understanding

6.14 Small Group • Group 2

I can use the distributive property to expand and factor expressions, explain why the method works, and use it on a problem I have not seen before.

Worked model

Each bundle has a ticket (\$15) and a snack (\$5). For 3 bundles I can write $3(15 + 5)$.

- Way 1: add inside first. $15 + 5 = 20$, then $3 \times 20 = 60$.
- Way 2: distribute the 3 to each part. $3 \times 15 + 3 \times 5$.
- That is $45 + 15 = 60$.
- Both ways give \$60, so $3(15 + 5) = 3 \times 15 + 3 \times 5$.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. Use the distributive property to expand each expression.

Complete the table. Show how you found each value.

Factored Form	Expanded Form
$3(2x + 5)$	
$7(a - 4)$	
$2(3m + 8)$	
$5(6 - y)$	

Show your work

2. Match each factored form to its expanded form.

Write the letter of the matching item on each line.

- _____ $2(x + 9)$
- _____ $5(3n - 2)$
- _____ $4(a + 6)$
- _____ $3(7 - y)$
- _____ $6(2m + 1)$
- _____ $8(x - 3)$

- A $2x + 18$
- B $15n - 10$
- C $4a + 24$
- D $21 - 3y$
- E $12m + 6$
- F $8x - 24$