

Sec 4.5 – Solving Equations Involving The Distributive Property

If an equation has brackets surrounding an expression, you may distribute the number in the front to remove the brackets. However, if the constant on the other side of the equal sign is _____ by the number in front of the brackets, you may choose to divide first. It is your choice!

Example

- 1) Solve the following equations algebraically, showing proper steps. Show 2 different methods. Verify the solution.

	Distributing First	Dividing First
a) $4(y + 3) = 4$		
b) $6 = -3(n - 7)$		
c) $2(x - 1) = 5$		

Practice – Solve for x .

1) $6(x - 5) = 18$

2) $-4(x + 7) = -30$

3) $27 = -3(x - 5)$

4) $5(2x + 1) = 45$

5) Ms. Lo wants to buy some bags of tulip bulbs that cost \$3 each. She wants to buy at least 7 bags. If she has \$54, how many more bags can she buy?

a) Write an equation that models this problem. Identify what the variable represents.

b) Solve the equation algebraically.

c) Verify the solution.

Cooking the Notes

How do you know when to use the distributive property to help you solve an equation?