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?

Practice – Solve for x.

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

$+30 \quad +30$

$6x-30=18$

$\frac{6x}{6}=\frac{48}{6}$

$x=8$

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

$+28 \quad +28$

$-4x-28=-30$

$\frac{-4x}{-4}=\frac{-2}{-4}$

$x=\frac{1}{2}$

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

$-15 \quad -15$

$27=-3x+15$

$\frac{12}{-3}=\frac{-3x}{-3}$

$-4=x$

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

$-5 \quad -5$

$10x+5=45$

$\frac{10x}{10}=\frac{40}{10}$

$x=4$

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.

$3(7+b)=54$

b) Solve the equation algebraically.

$3(7+b)=54$

$-21 \quad -21$

$21+3b=54$

$3b=33$

$b=11$ $

c) Verify the solution.

$3(7+11)=54$

$3(18)=54$

$54=54$

✓ ✓

Cooking the Notes

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

when there are brackets & unlike terms.