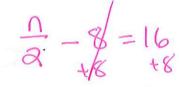
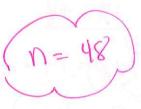
# 2-3 Notes

## Solving Multi-Step Equations

When solving multi-step equations, we 'undo' operations by working 'backwards.' Reverse the usual order of operations as you work.

Example 1: A number is divided by 2, and then 8 is subtracted from the quotient. The result is 16. What is the number?



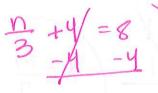


#### **Exercises**

Solve each problem.

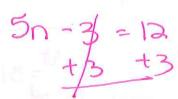
1. A number is divided by 3, and then 4 is added to the quotient.

The result is 8. Find the number.



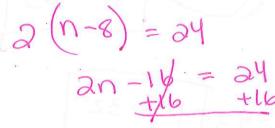


2. A number is multiplied by 5, and then 3 is subtracted from the product. The result is 12. Find the number.





3. Eight is subtracted from a number, and then the difference is multiplied by 2. The result is 24. Find the number.





4. CAR RENTAL Angela rented a car for \$29.99 a day plus a one-time insurance cost of \$5.00. Her bill was \$124.96. For how many days did she rent the car?

Lost = 29,99d + 5.00

Chapter 2

Glencoe Algebra 1

# 2-3 Notes (continued)

#### Exercises

Solve each equation. Check your solution.

1. 
$$\frac{7}{8}p - 4 = 10$$

$$\frac{8}{7} = \frac{14 \cdot 8}{7}$$

$$\frac{4b + 8}{7} = 10 \cdot 2$$

$$\frac{4b + 8}{-2} = 10 \cdot 2$$

$$\frac{4b + 8}{-8} = -28$$

2. 
$$\frac{g}{-5} + 3 = -13$$

$$\begin{pmatrix} -8 \\ -4 \end{pmatrix} = \begin{pmatrix} 80 \\ -8 \\ -8 \end{pmatrix} = \begin{pmatrix} 80 \\ -8 \\ -8 \end{pmatrix}$$

$$32 = 7x + 1$$

$$-1 \qquad -1$$

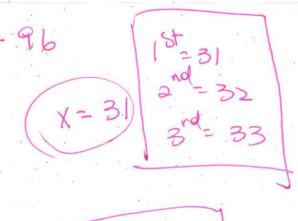
$$31 = 1x$$

$$\left(\chi = \frac{31}{7}\right)$$

### Write an equation and solve each problem.

5. Find three consecutive integers whose sum is 96.

$$x + (x+1) + (x+2)$$
  
 $3x+3 = 916$   
 $-5 - 3$   
 $3x = 93$ 



6. Find three consecutive integers whose sum is -93.

6. Find three consecutive into

let 
$$\chi = 1$$
 st integer

 $\chi + 1 = 2$  and

 $\chi + 2 = 3$  and

$$x + (x+1) + (x+2) = -93$$
  
 $3x + 3 = -93$   
 $-3$   
 $3x = -96$   
 $3x = -96$   
 $3x = -96$