Warm-up: Solve the equations for x.

1. $\frac{7x}{7} = \frac{56}{7}$

$\boxed{x = 8}$

2. $9x - 8 = 10$
$+8 \quad +8$

$\frac{9x}{9} = \frac{18}{9}$

$\boxed{x = 2}$

3. $-4 \cdot -5 = \frac{x}{-4} \cdot -4$

$\boxed{20 = x}$

4. $4x = 2x + 16$
$-2x \quad -2x$

$\frac{2x}{2} = \frac{16}{2}$

$\boxed{x = 8}$

Key Words & Concepts

Solution - the value of x that makes the equation true

All Real Numbers - Any number can be used for x and make the equation true

$2 = 2 \quad 7 = 7$
$20 = 20$

No Solution – there is no number that can make the equation true

$10 = 2$

Solving Equation Steps -

1. Distribute ( )
2. Combine like-terms
3. Variables on the same side
4. Constants on the same side
5. Get variable alone

Solving Equations Practice

Example 1: $-(x-2) = x + 6$

Example 2: $-2(x+3) = 4x + 8$

Example 3: $\frac{1}{3}(27x - 15) + 2 = 2x + 7 + 7x$

Example 4: $5 + \frac{3}{4}(8x - 4) = 26$

Example 5: $\frac{2}{5}(25x - 15) + 2 = 3x - 4 + 7x$

Example 6: $\frac{4x-6}{3} = -10$

Example 7: $\frac{2x}{4} - 7 = -11$

Example 8: $\frac{5m-10}{8} = \frac{5m+10}{4}$

Example 9: $\frac{2x}{3} + \frac{x}{2} = 7$

Int2Acc | Notes 1-1 Solving Equations | Unit 1

Perimeter, Circumference, Area, Volume Review

Perimeter-

Circumference -

Area -

Volume -

Example 9: Set up an expression for the area & perimeter for each of the following.