Aim: Identify properties when solving equations with variables on both sides

Do Now:

<u>Directions:</u> Solve the following equations and state every property that you use.

If 0.02x + 0.7 = 0.8, then what is a solution for x?

1. What is the solution for x in the equation 2(x-3) = 1.2 - x?

2. What is the solution of x in the equation 5(3x-2) = 15x-10?

3. What is the solution to the following equation? 2(x-3) = 2x + 5

4. Solve the equation for d: 0.2(d-6) = 0.3d + 5 - 3 + 0.1d

5. Describe the property used to convert the equation from one line to the next:

$$x(1-x) + 2x - 4 = 8x - 24 - x^2$$

$$x - x^2 + 2x - 4 = 8x - 24 - x^2$$

$$x + 2x - 4 = 8x - 24$$

$$3x - 4 = 8x - 24$$

$$3x + 20 = 8x$$

$$20 = 5x$$

$$x = 4$$

Name:
Exit Card:
<u>Directions:</u> Solve the following equations and state every property that you use.
$\frac{3}{4} (4x - 8) + 5x = 7x - 6$
How many solutions are there?
Name:

Exit Card:

<u>Directions:</u> Solve the following equations and state every property that you use.

$$\frac{3}{4}(4x - 8) + 5x = 7x - 6$$