

2.1 Identify Properties for Solutions - Day 2

1. $4m - 9 = 19$ Given
 $4m - 9 + 9 = 19 + 9$ Addition Property of Equality
 $4m + 0 = 19 + 9$ Additive Inverse Property
 $4m = 19 + 9$ Additive Identity Property
 $4m = 28$ Simplify
 $\frac{4m}{4} = \frac{28}{4}$ Division Property of Equality
 $m(1) = \frac{28}{4}$ Multiplicative Inverse Property
 $m = \frac{28}{4}$ Multiplicative Identity Property
 $m = 7$ Simplify

2. $\frac{x}{7} + 5 = 1$ Given
 $\frac{x}{7} + 5 - 5 = 1 - 5$ Subtraction Property of Equality
 $\frac{x}{7} + 0 = 1 - 5$ Additive Inverse Property
 $\frac{x}{7} = 1 - 5$ Additive Identity Property
 $\frac{x}{7} = -4$ Simplify
 $\frac{x}{7}(7) = -4(7)$ Multiplication Property of Equality
 $x(1) = -4(7)$ Multiplicative Inverse Property
 $x = -4(7)$ Multiplicative Identity Property
 $x = -28$ Simplify

3. $(3m + 2) + 5 = 13$ Given
 $3m + (2 + 5) = 13$ Associative Property
 $3m + 7 = 13$ Simplify
 $3m + 7 - 7 = 13 - 7$ Subtraction Property of Equality
 $3m + 0 = 13 - 7$ Additive Inverse Property
 $3m = 13 - 7$ Additive Identity Property
 $3m = 6$ Simplify
 $\frac{3m}{3} = \frac{6}{3}$ Division Property of Equality
 $m(1) = \frac{6}{3}$ Multiplicative Inverse Property
 $m = \frac{6}{3}$ Multiplicative Identity Property
 $m = 2$ Simplify

HOMEWORK

Worksheet HW 2.1

Identify Properties - Day 2