

Properties of Equality Practice Worksheet C

Name _____

Key

Class Period _____

Solve the equation and identify the property of equality that justifies the missing step(s) to solve the given equation.

Equation	Steps
$\frac{1}{3}x + 4 = 7$	Given
$\frac{1}{3}x = 3$	Subtraction Prop. of =
$x = 9$	Multiplication Prop. of =

Equation	Steps
$2(4x + 6) = 8$	Given
$4x + 6 = 4$	Division Prop. of =
$4x = -2$	Subtraction Prop. of =
$x = -\frac{1}{2}$	Division Prop. of =

Equation	Steps
$3(x - 9) = 2(2x + 3)$	Given
$3x - 27 = 4x + 6$	Distributive Prop.
$-x - 27 = 6$	Subtraction Prop. of =
$-x = 33$	Addition Prop. of =
$x = -33$	Division Prop. of =

Equation	Steps
$3x + 2x - 5 = x - 7 + 10$	Given
$5x - 5 = x + 3$	Combine Like Terms
$4x - 5 = 3$	Subtraction Prop. of =
$4x = 8$	Addition Prop. of =
$x = 2$	Division Prop. of =

Equation	Steps
$5 = \frac{x+2}{3}$	Given
$15 = x + 2$	Multiplication Prop. of =
$13 = x$	Subtraction Prop. of =
$x = 13$	Symmetric Prop. of =

Equation	Steps
$8 + x - 2 = 3x + 11 - x$	Given
$6 + x = 2x + 11$	Combine Like Terms
$6 - x = 11$	Subtraction Prop. of =
$-x = 5$	Subtraction Prop. of =
$x = -5$	Division Prop. of =