

## SOL A.4 Worksheet

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*Show work. Circle or box answer.*

1.) Solve:  $3 = 6x - 51$

2.) Solve:  $-15c + 7c + 1 = 3 - 8c$

3.) Solve:  $5(9 + 6f) = -135$

4.) Solve:  $7(r + 7) = 7r + 59$

5.) Solve:  $6g - 1 = -1 + 2(3g)$

6.)  $6.2h + 5 - 1.4h = 4.8h + 5$

7.) Solve:  $-4(-1 - 7p) = -304$

8.)  $9 - 8f = -4(-2f - 1)$

Justify the steps for each equation:

Bank (you will not use every options):

Multiplicative Property of Zero	Reflexive Property	Transitive Property of Equality
Addition Property of Equality	Subtraction Property of Equality	Multiplication Property of Equality
Division Property of Equality	Substitution	Symmetric Property
Distributive Property	Associative Property	Commutative Property
Identity Property	Inverse Property	

$3(3x + 2) - 12 = 6x + 9 + -9$	Given
$9x + 6 - 12 = 6x + 9 + -9$	
$9x - 6 = 6x + 9 + -9$	
$9x - 6 = 6x$	
$9x = 6x + 6$	
$3x = 6$	
$x = 2$	

$21 = (2(y + 6)) + (-12)$	Given
$21 = (2y + 12) + (-12)$	
$21 = 2y + (12 + (-12))$	
$21 = 2y$	
$10.5 = y$	
$10\frac{1}{2} = y$	
$y = 10\frac{1}{2}$	