Name _____

Date _____

Solving Basic Equations in 3 Steps

Solve the equations below and write the algebraic steps. The first problem is already done for you.

12x + 6 = 54	$\frac{a}{3} + 5 = 7$	9x + 3 = 30
12x + 6 - 6 = 54 - 6		
$12x \div 12 = 48 \div 12$		
x = 4		
$\frac{x}{5} - 1 = 2$	5x - 11 = 19	6x - 6 = 30
5a + 50 = 75	3x - 9 = 21	3x + 8 = 35

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Answer Key

12x + 6 = 54	$\frac{a}{3} + 5 = 7$	9x + 3 = 30
12x + 6 - 6 = 54 - 6	a + 15 = 21	9x + 3 - 3 = 30 - 3
$12x \div 12 = 48 \div 12$	a = 21 – 15	$9x \div 9 = 27 \div 9$
x = 4	a = 6	x = 3
$\frac{x}{5} - 1 = 2$	5x - 11 = 19	6x - 6 = 30
x - 5 = 10	5x - 11+ 11 = 19 + 11	6x - 6 + 6 = 30 + 6
x = 10 + 5	$5x \div 5 = 30 \div 5$	$6x \div 6 = 36 \div 6$
x = 15	x = 6	x = 6
5a + 50 = 75	3x - 9 = 21	3x + 8 = 35
5a + 50 - 50 = 75 - 50	3x - 9 + 9 = 21 + 9	3x + 8 - 8 = 35 - 8
5a ÷ 5 = 25 ÷ 5	$3x \div 3 = 30 \div 3$	$3x \div 3 = 27 \div 3$
a = 5	x = 10	x = 9