

Name _____ Date _____ Period _____

Unit 1 Solving Equations review

1-8 Choose two rows, or columns of literal equations to solve for full credit. A total of 8 problems

Solve for x $x + a = b$	Solve for x $ax + b = c + d$	Solve for x $bx - 5 = c$	Solve for y $36 = bxy$
Solve for x $cx - d = 4$	Solve for x $s = 4x$	Solve for y $x + sy = t$	Solve for x $m = 2(x + n)$
Solve for x $4x - 5c = 3c$	Solve for x $abx - d = 5d$	Solve for y $\frac{1}{4}y = c$	Solve for x $3x - s = r$
Solve for y $\frac{x}{3} + \frac{y}{3} = 2$	Solve for h $A = \frac{1}{2}h(b + c)$	Solve for p $5(4x + p) = w$	Solve for T $P = IRT$

Solve the following Equations and indicate the number of solutions: ONE, NO SOLUTION, or INFINITE SOLUTIONS.

9) $-2r - 15 = -4(-r - 8) - 5$

10) $7(a - 2) = -17 - 7a$

11) $2(b + 1) + 6 = 2b + 8$

12) $39 - 8x = -5x - 2(5x + 5)$

13) $-26 - 8a = 8(-2a - 7) + 6$

14) $-7r - 21 = -3(r + 7) - 4r$

Give a numerical example for each of the following properties (MUST BE DIFFERENT THAN YOUR NOTES):

15) Distribution property	16) Addition Property of Equality
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17) Subtraction Property of equality	18) Multiplication Property of Equality
19) Division Property of Equality	20) Additive Inverse
21) Additive Identity	22) Multiplicative Inverse
23) Multiplicative Identity	24) Symmetric Property
25) Substitution Property	26) Multiplication Property of '0'
27) Exponential Property of Equality	28) Associative Property of addition
29) Associative Property of Multiplication	30) Commutative property of addition
31) Commutative Property of multiplication	

'Translate' following equations, solve and justify each step:

<p>32) The sum of thirty one and seven times a number is negative six times the sum of four and negative three times a number.</p> <div style="border: 1px solid black; width: 100%; height: 100%; display: flex; justify-content: center; align-items: center;"> <div style="border-right: 1px solid black; width: 50%; height: 100%;"></div> <div style="width: 50%; height: 100%;"></div> </div>	<p>33) -164 is four times the difference of one and six times a number.</p> <div style="border: 1px solid black; width: 100%; height: 100%; display: flex; justify-content: center; align-items: center;"> <div style="border-right: 1px solid black; width: 50%; height: 100%;"></div> <div style="width: 50%; height: 100%;"></div> </div>
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For each of the following a) Find the mistake, b) describe the mistake, c) re-solve the problem correctly FROM THE BEGINNING.

34) a) $-(2x + 5) + 2 = -3 - 2x$	b)	c) $6(1 + 5k) = 6 - 6k$
35) a) $-8(6x - 6) = -5 + 5x$	b)	c) $-8(6x - 6) = -5 + 5x$