Name:	Chapter 2: Logic & Proof Homework: Algebra Proofs	
Date: Period:		
Directions: Name the property of equality that justifies each	ı statement.	
1. If $a = 2b$, then $a - c = 2b - c$ 2. $x = x$ 3. $3(p - 7) = 3p - 21$ 4. If $-7k = -42$, then $k = 6$ 5. If $m + n = 15$ and $n = 2$, then $m + 2 = 15$ 6. If $\frac{x}{4} = -5$, then $x = -20$ 7. If $w^2 = 2x$ and $2x = y$, then $w^2 = y$ 8. If $c - 9 = -1$, then $c = 8$ 9. If $n = -3$, then $-3 = n$	 A. Addition Property of Equality B. Subtraction Property of Equality C. Multiplication property of Equality D. Division Property of Equality E. Distributive Property F. Substitution Property G. Reflexive Property H. Symmetric Property I. Transitive Property 	
Directions: Complete each proof using the properties of equal 10. Given: $-8(x-3) = -32$; Prove: $x=7$	uality. Not all rows may be used.	
Statements	Reasons	
11. Given: $-16 = \frac{m}{5} - 18$; Prove: $m = 10$		
Statements	Reasons	

12.	Given:	$\frac{2y-1}{2} = \frac{2y-1}{2}$	-5;	Prove: y	= 8
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Statements	Reasons

13. Given: 2x + 30 = -4(5x - 2); Prove: x = -1

Statements	Reasons

14. Given: 18x - 2(3x + 1) = 5x - 16; Prove: x = -2

Statements	Reasons
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