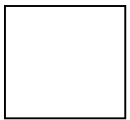


Name: _____

Unit 2: Logic & Proof



Date: _____ Per: _____

Homework 7: Algebraic Proofs (Day 2)

**** This is a 2-page document! ****

Directions: Complete each proof using the properties of equality. Not all rows may be used.

1. **Given:** $4d = \frac{1}{3}(c - d)$; **Prove:** $c = 13d$

Statements	Reasons

2. **Given:** $\frac{3j+k}{2} = 15 - 4k$; **Prove:** $j = 10 - 3k$

Statements	Reasons

3. **Given:** $5x - 2y = x + 14$; **Prove:** $y = 2x - 7$

Statements	Reasons

4. **Given:** $a + m = n$, $n = 4a$; **Prove:** $m = 3a$

Statements	Reasons

5. **Given:** $2q - r = p$, $r = q - s$, $p = q + 2r$; **Prove:** $s = 2r$

Statements	Reasons

6. **Given:** $3c + d = f + g$, $d = f$, $g = c + 8$; **Prove:** $c = 4$

Statements	Reasons

7. **Given:** $8x - 3y = -21$, $3x + y = -10$; **Prove:** $x = -3$

Statements	Reasons