

Algebra I *ALL WORK
Q4 HW6 ON LOOSELEAF

Name: _____
Period: _____ Date: _____

ORDER OF OPERATIONS: _____

① $(7-5)^3 + 1 - 4^2 \cdot 6$ ② $5x + \frac{3x+6x}{3} - 16x$

③ $7.2 - |-8.1 + 4.6|$ ④ $3 \cdot 2^4 \div 12 + (3-2^3)$

Add & Subtract Polynomials: _____

⑤ $7x + 3(8x-2) - y$ ⑥ $-x - x + y - y$

⑦ $\frac{1}{5}x + \frac{1}{5}y - \frac{1}{2}(\frac{1}{3}x + \frac{1}{3}y)$ ⑧ $3.1x - 2.1y + 4.02x$

⑨ $-(7x^2 - 2x + 3) - (-5x^2 + 3x + 3)$

Multiply Polynomials: _____

⑩ $\frac{3x}{6} \cdot \frac{4y}{3}$ ⑪ $(7x+3)(8x-2)$

⑫ $(2x-6)(2x+6)$ ⑬ $5x(6y) - (8x)(-y)$

⑭ $\left(\frac{x+6}{9}\right)^2$ ⑮ $3x^3(2x)^2$

Multi-Step First Degree Equations: (SOLVE AND check) _____

⑯ $3(2x+6) = 5x - 1$ ⑰ $8(x+6) - 2 = 4x + 6(x+1)$

Factor Polynomials: _____

⑱ $4x^2 - 36$ ⑲ $2x^2 - 9x - 18$

⑳ $5x(x+3) + (x+3)$ ㉑ $10x^2 - 13x - 3$

SOLVE QUADRATIC EQUATIONS by FACTORING: _____

㉒ $9x^2 - 1 = 0$ ㉓ $x^2 - 10 = 3x$

㉔ $8x^2 + 10x = -3$ ㉕ $3x^2 + 11x = 4$