

Name _____ Period _____

Algebra 2 Honors October Tune-up #1

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| <p>1. Evaluate when $x = \frac{1}{2}$ and $y = -3$:</p> $2xy^2 - 5[2x - 3]$ | <p>2. Simplify:</p> $4x(3x^2 - 2xy + 3) - 2(3x^4 - 2x^2y + 3)$ |
| <p>3. Solve for x:</p> $\frac{2}{9}(x+4) - 5x = \frac{1}{2}(x+3)$ | <p>4. Solve and graph: $3x - 7 \leq 5$</p> |
| <p>5. Simplify: $(4 - 5i)(6 + 7i)$</p> | <p>6. Evaluate $f(-3)$</p> $\text{if } f(x) = \begin{cases} 2x - 4, & x > 3 \\ 6 - 2x, & x \leq 3 \end{cases}$ |
| <p>7. Graph: $y = -2(x - 3)^2 + 4$</p> | <p>8. Graph: $y = \frac{3}{4} x - 2 - 1$</p> |
| <p>9. Solve: $x + 2y - z = -3$ (do this problem on the back)</p> $2x + y - 3z = 2$ $3x - 2y + z = 19$ | |

