U1D2 Warm Up: Simplify. $(y + 7)(y^2 - 2y + 9) - 3[8 - 4(y + 1)^2]$

MCR 3UI **Review of Grade 10 Prerequisite Skills**

Factoring

Common Factoring

$36x^7 + 24x^5$

$10a^2b + 5ab - 15a$

Simple Trinomial Factoring

$x^2 - 8x + 15$

$a^2 - 3a - 40$

Multi-Step Trinomial Factoring

$2y^2 - 7y + 5$

$12s^2 - 14s - 6$

Special Factoring

$81y^4 - 16$	$25x^2 - 70x + 49$	$w^2 + 2w + 1 - y^2$	$2y^3 - 6y^2 - 5y + 15$

Solving Linear Equations

Remember, solving an equation means "find all the values of the variable that make the equation true". A linear equation has only one variable with the exponent of "1".

Steps:

1. _____ any fractions (multiply all terms by a common denominator).
2. _____ any brackets.
3. Collect the _____ terms on one side of the equal sign, _____ terms on the other side.
4. _____ like terms.
5. _____ the variable by dividing out any coefficient.

Examples

$5(x - 3) - 2x = -6$ $\frac{y-1}{3} = 6$

Solving Quadratic Equations

A quadratic equation has the form _____.

Steps:

1. _____ any brackets.
2. _____ like terms.
3. Write equation as shown above (so that it _____)
4. _____ the quadratic.
5. Set each factor to _____ and _____ each linear factor.

Examples

$2y^2 + 7y + 3 = 0$ $x(x - 4) = -4$

U1D2 HW: Pg. 3 #1-7 (every other one for each question)