w↑: Factor the expressions

1.) $16x^2 - 80x$

2.) $35x^3 + 10x$

3.) $24x + 144x^2$

4.) $27x^4y^7z^3 - 63x^2y^8z^4$

Factoring Trinomials

Section 10.5

Factoring Trinomials

- Trinomial is of the form: $ax^2 + bx + c$

Steps to Follow

1. Set the equation equal to zero

2. Multiply the **c-term** by the **a-term**

3. Find factors of **ac** that add to get the **b-term**

4. Fill in the parenthesis using the correct signs

Examples

1.) $x^2 + 8x + 15$ 2.) $x^2 + 5x + 6$

Examples (cont.)

3.) $x^2 + x - 6$

4.) $x^2 - 3x - 18$

Examples (cont.)

5.) $x^2 + x - 20$ 6.) $x^2 - 4x - 32$