

## Lesson: Mixed Factoring

### PROCEDURE

- 1) Factor using GCF, if possible.
- 2) Factor the trinomial, if possible.

### EXAMPLES

*Factor each expression.*

$$1) \quad 3x^3 + 3x^2 - 36x$$

$$2) \quad 2x^4 - 16x^3 - 96x^2$$

$$3) \quad 21m^4 n^2 - 14m^5 n^4 + 56m^2 n^2$$

## Lesson: Special Cases of Factoring

### PATTERN

Factor  $x^2 - 25$ .

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#### Difference of Two Squares

$$a^2 - b^2$$

### EXAMPLES

1)  $x^2 - 36$

2)  $x^2 - 16y^2$

3)  $9x^2 - 49$

4)  $a^2b^2 - 4a^4$

5)  $25x^2 + 100$

6)  $3x^2 - 75$