

## MAT0028 ~ Lesson 34

Work the following examples as you listen to the recorded lecture.

### Factoring Binomials (Squares)

#### Remember:

1. Signs for Squares Binomials are always "one of each."
2. Sum of Squares problems will not factor.

Example 1: $x^2 + 16$	Step 1: Set signs for the factors.
(        ) (        )	Step 2: Factor the variable squares.
	Step 3: FOIL to check.

Example 2: $x^2 - 16$	Step 1: Set signs for the factors.
(        ) (        )	Step 2: Factor the variable squares.
	Step 3: FOIL to check.

Example 3: $x^2y^2 - 1$	Step 1: Set signs for the factors.
(        ) (        )	Step 2: Factor the variable squares.
	Step 3: FOIL to check.

## Factoring Binomials (Squares), page 2

Example 4: $4x^2y^2 - 1$	Step 1: Set signs for the factors.
(            ) (            )	Step 2: Factor the variable squares.
	Step 3: FOIL to check.

Example 5: $-36 + x^2$	Step 1: Set signs for the factors.
(            ) (            )	Step 2: Factor the variable squares.
	Step 3: FOIL to check.

Example 6: $x^4 - y^{18}$	Step 1: Set signs for the factors.
(            ) (            )	Step 2: Factor the variable squares.
	Step 3: FOIL to check.

Example 7: $3x^2y^3 - 12y^5$	Step 1: Set signs for the factors.
(            ) (            )	Step 2: Factor the variable squares.
	Step 3: FOIL to check.