Factoring

Factoring Special Polynomials

Difference of Squares: $a^2 - b^2 = (a + b)(a - b)$

Foil (a+b)(a-b)

Factor the following expressions.

$x^2 - 4$

$16y^2 - 49$

$50 - 8t^2$

$p^2 + 9$

Difference of Squares: $a^2 - b^2 = (a + b)(a - b)$

Factor the following expressions.

$x^2 y^2 - 1$

$9y^2 - 64z^2$

$2x^7 y^3 - 200x^5 y^5$

$r^4 - p^{12}$

Perfect Square Trinomials:

$$a^2 + 2ab + b^2 = (a+b)^2$$

$$a^2 - 2ab + b^2 = (a-b)^2$$

Expand $(a+b)^2$

Expand $(a-b)^2$

Factor the following expressions completely.

$$x^2 + 10x + 25$$

$$64y^2 - 48y + 9$$

$$100t^2 + 40t + 4$$

$$18r^2 - 12r + 2$$

Factor the following expressions completely.

$$x^2 y^2 + 12xy + 36 \qquad\qquad 81r^2 - 54rt + 9t^2$$

$$121p^{12} - 88p^{11} + 16p^{10}$$