29 $8x^5 - 25y^3 + 80x^4 - x^2y^3 + 200x^3 - 10xy^3$ $(2x - y)(4x^2 + 2xy + y^2)(x + 5)^2$

GCF: $8x^3$

$$8x^5 + 80x^4 + 200x^3 - x^2y^3 - 10xy^3 - 25y^3$$

$$8x^3(x^2 + 10x + 25) - y^3(x^2 + 10x + 25)$$

$$a^3 - b^3$$

$$= (8x^3 - y^3)(x^2 + 10x + 25)$$

$a = 2x$
$b = y$

$$(2x)^3 - (y)^3$$

$$(2x - y)(4x^2 + 2xy + y^2)(x + 5)(x + 5)$$

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

23. $x^6y^3 + y^9$

GCF: y^3

$y^3\left(x^6 - y^6\right)$

$y^3\left[\left(x^2\right)^3 - \left(y^2\right)^3\right]$

$a = x^2$
$b = y^2$

$a^3 - b^3 = (a-b)(a^2 + ab + b^2)$

$y^3\left(x^2 - y^2\right)\left(x^4 + x^2y^2 + y^4\right)$

$y^3(x+y)(x-y)\left(x^4 + x^2y^2 + y^4\right)$

$$8x^3 - y^3$$

$$(2x)^3 - (y)^3$$

$$a^3 - b^3$$