

### Answers for Section EA.4 Polynomials and Exponents

- $-2x + 8y$
- $3x^2y - xy^2 + 10xy$
- $2x^2 - 3x + 4$
- $9x + 4$
- $10x^2y^2$
- $-30xy^2$
- $10x^2y^2 + 20xy$
- $-6x^3 + 10x$
- $x^2 - x - 6$
- $x^2 - 9y^2$
- $6x^2 - 7xy - 20y^2$
- $x^3 + x + 3x^2y + 3y$
- $5x^3y + 10x^2y + 5xy$
- $-2x^3 + 6x^2 + 8x$
- $x^3 - 4x^2 + 3x + 2x^2y - 8xy + 6y$
- $x^3 + 1$
- $a^2 + 2ab + 2ac + 2bc + b^2 + c^2$
- $a^4 + 4a^3 + 4a^2 + 11a - 20$
- $3x$
- $2x$
- $x + 3$
- $x - 4R6$
- $x - 3$
- $x^2 - 2x + 4$
- $x + 2 + \frac{8}{x-2}$
- $x^2 - 3x + 9 - \frac{28}{x+3}$
- $x^8$
- $15x^6$
- $x^6$
- $27x^3y^6$
- $x^2$
- $3x^5$
- $\frac{4x}{y}$
- $\frac{1}{2x}$
- $\frac{2}{x}$
- $1$
- $1$
- $4x^6$

### Answers for Section EA.5 Factoring Polynomials

- $3(x - 4y)$
- $6x(x + 3y)$
- $(x + 4)(x - 4)$
- $(3x + 4y)(3x - 4y)$
- $(x + 6)^2$
- $(x - 9)^2$
- $(2x + 3)^2$
- $2(x - 1)(x + 3)$
- $(x - 5)(x + 2)$
- $(x + 6)(x - 2)$
- prime (does not factor)
- $(2x + 5)(x - 3)$
- $(x + 7y)(x - 2y)$
- $(2x + 3y)(2x - 3y)$
- $(3x + 4)(2x + 3)$
- $(4x + 1)(3x - 1)$
- $x = -2, -3$
- $x = 0, 5$
- $x = \pm 6$
- $x = -4$
- $x = -3, 4$
- $x = -8, 2$
- $x = -8, -4$
- $x = 2, 5$

25.  $x = -3, -2$

27.  $x = -3,5$

29.  $x = -2,6$

26.  $x = \pm 5$

28.  $x = -4,8$

30.  $x = -5,2$