

Chapter 4

Getting Ready, page 302

- $\frac{-7}{20}$
 - $\frac{-67}{18}$
 - $\frac{9}{14}$
 - $\frac{175}{8}$
 - 6
 - $\frac{5}{14}$
 - 3
 - $\frac{-1}{12}$
 - $\frac{-217}{240}$
 - $\frac{-1}{26}$
 - $\frac{-27}{80}$
 - $\frac{-185}{64}$
- $-24xyz$
 - $30ab^2c^2$
 - $9p$
 - $\frac{2m^3}{n}$
 - $30a^2bc^2d^2$
 - $4bc^3$
- $-4x^3 + 8x^2 - 12xy$
 - $15x^2y + 5x^2y^2 - 10xy^2$
 - $-21a^4 + 12a^3 - 6a^2$
 - $17x^2 - 13x$
 - $-24y^2 + 33y$
 - $-7y^2 + 3y$
 - $2x^3 + x^2$
 - $x^4 - x^2 - 6x$
- $-2a^2 - 3c^2$
 - $3y^3 - 2z^2 + 5$
 - $1 - z$
 - $2r - 3p + 5k$
- $x^2 - 4x + 4$
 - $x^2 - 3x - 4$
 - $2x^2 + x - 6$
 - $12x^2 - 7x - 10$
 - $16a^2 - 9$
 - $4x$
 - $\frac{3}{2}x^2 + \frac{3}{4}x - \frac{1}{6}$
 - $0.06x^2 + 0.03x + 0.3$
- 200
 - 75.2997
 - $\frac{-10\,003}{9999}, \frac{-9997}{10\,001}$
 - 999, -1001
 - $x(5y - 2)$
 - $x(2x - 3y)$
 - $6m^2n^2(3m + 2n)$
 - $3p^3q^2r(5pr + 7pqr)$
 - $(x - 5)(x - 4)$
 - $(y + 4)(y - 8)$
 - $(t - 6)(t + 8)$
 - $3(x + 3)(x + 5)$
 - $21(x + 2)(x - 1)$
 - $(x - 7)(x + 7)$
 - $(5y + 8)(5y - 8)$
 - $2(5x - 6)(5x + 6)$
 - $7(y + 2z)(y - 2z)$
 - $(3x - 1)^2$
 - $(2a + 5)^2$
 - $(2x - 3)(x + 2)$
 - $(2y - 3)(y + 4)$
 - $(2a - 1)(5a + 3)$
- line, x-intercept: $-\frac{4}{3}$, y-intercept: 1
 - line, x-intercept: $-\frac{2}{3}$, y-intercept: -2
 - vertical line, x-intercept: 7.5
 - horizontal line, y-intercept: -1.2
 - line, x-intercept: 5, y-intercept: 2
- $y = -1$
 - $2x + 3y - 11 = 0$
 - $5x + 2y - 10 = 0$
- parabola, opens up, zeros at 3, 5; vertex: (4, -1), y-intercept: 15
 - parabola, opens down, zeros at -3, 2; vertex: (-0.5, 6.25), y-intercept: 6
 - parabola, opens down, zeros at 3, 5; vertex: (4, 2), y-intercept: -30
 - parabola, opens down, zeros at $\pm\sqrt{5}$, vertex: (0, 5), y-intercept: 5
 - parabola, opens up, zeros at -7.16, -0.84; vertex: (-4, -5), y-intercept: 3
 - parabola, opens down, zeros at 0, 4; vertex: (2, 12), y-intercept: 0
 - parabola, opens down, no zeros; vertex: (2, 3), y-intercept: 7
- $x = -7, x = 3$
 - $x = -2, x = -6$
 - $x = \frac{1}{3}, x = -\frac{5}{2}$
- 6000
 - 2061
 - no, since $P = 0$ has no real roots
- $x = \pm\sqrt{10} - 3$
 - $\pm\sqrt{11} + 4$
 - $1 \pm \frac{3}{\sqrt{2}}$
 - $\frac{3}{4} \pm \frac{\sqrt{3}i}{4}$
- $x = 1.50, x = -1.00$
 - $x \doteq 0.42, x \doteq 3.58$
 - $x \doteq -3.93, x \doteq 0.59$
 - $x = 1.85, x = -1.20$
- 0
 - 2
 - 0
 - 2