

From Test 1

1. a) No Sol b) All Real Numbers c) $E > 6$ d) $0 < B < 2$ e) $M \leq 6$
2. a) (11, 7) b) (-4, -29) c) (-2, 8, 1) 3. a) 86 b) $x^2 - 5x + 4$

Chapter 5

1. $y = -3(x + 4)^2 + 10$ 2. a) $x = -4$ b) (-4, 45) c) 13 d) Max
3. a) $x = 1$ b) (1, 6) c) 9 d) Min
4. a) $x = \frac{5}{2}, 0$ b) $x = 2, -5$ c) $x = 2, -\frac{5}{2}$ d) $x = \pm 3, -\frac{7}{2}$
5. a) $x = \pm\sqrt{7}$ b) $x = -3 \pm 4i$ 6. a) $x = 0.05, -5.05$ b) $x = 2 \pm 5i$
7. a) 6.25 sec b) 655 ft c) 12.65 sec 8. $22 + 14i$

Chapter 6

1. a) $x = \pm 2i, \pm\sqrt{6}$ b) $x = \pm 2i\sqrt{2}, 5$ 2. a) Deg= 5 LC= 1 b) Deg= 8 LC= -200
3. a) ($\nwarrow, \nearrow$) b) ($\swarrow, \searrow$) c) ($\nwarrow, \searrow$) d) ($\swarrow, \nearrow$) 4. $y = -x(x + 2)^2(x - 3)^3$
5. a) Linear b) Quadratic c) Constant d) Cubic
6. a) Trinomial b) Monomial c) Binomial

Chapter 9

1. 11,250 2. $\frac{x(x+4)}{2(x+5)}$ $x \neq \pm 6, -5, 0, 2$
3. $\frac{4x^2 - 5x + 15}{(x-2)(x+5)(x-5)}$ 4. Hole at $x = 4$ VA at $x = -3$
5. a) $y = 3$ b) $y = 0$ c) No HA 6. $y = \frac{-2}{x+3} - 1$ 7. a) $x = -2.75$ b) $x = 5$