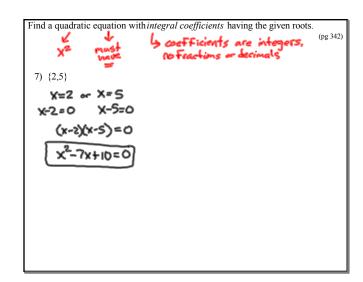
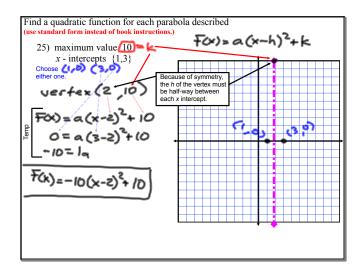
Algebra II

7-7
Writing Quadratic
Functions



Find a quadratic equation with integral coefficients having the given roots.

23) $\left\{ \frac{1 \pm i\sqrt{5}}{4} \right\}$ $\times = \frac{1 + i\sqrt{5}}{4} \quad \times = \frac{1 - i\sqrt{5}}{4}$ $4x = 1 + i\sqrt{5} \quad 4x = 1 - i\sqrt{5}$ $4x - 1 - i\sqrt{5} = 0 \quad 4x - 1 + i\sqrt{5} = 0$ $(4x - 1 - i\sqrt{5}) \quad 4x - 1 + i\sqrt{5} = 0$ $(4x - 1 - i\sqrt{5}) \quad 4x - 1 + i\sqrt{5} = 0$ $16x^2 - 4x + 4x + 1 + i\sqrt{5} - 4x + 1 + i\sqrt{5} = 0$ $16x^2 - 8x + 6 = 0$



Find a quadratic function for each parabola described (use standard form instead of book instructions.)

29) vertex (2,12) $x - intercepts \{-4,8\} - (8,0)$ $F(x) = a(x-2)^2 + 12$ -12 = 36a $-\frac{1}{3} = a$ $F(x) = -\frac{1}{3}(x-2)^2 + 12$

Assignment:
Pg. 342
2-36 even