HAP 1.4 Radical Equations, Quadraics

1. Solve Radical Equations
   (a) $\sqrt{2x-4}=4$

   (b) $\sqrt{7-6x}=x$

   (c) $x=2\sqrt{6x-36}$

   (d) $\sqrt{x^2-x-7}=x+3$

   (e) $\sqrt{3x+1}-\sqrt{x-1}=2$

2. Solve Equations Quadratic in form
   (a) $x^2+3x+2=0$

   (b) $(x+6)^2+3(x+6)+2=0$

   (c) $x+\sqrt{x}=30$

(d) $\dfrac{1}{(x+6)^2} = \dfrac{1}{(x+6)} + 12$

(e) $8x^{2/3} - 39x^{1/3} - 5 = 0$

3. Find solutions by factoring

(a) $x^3 - 49x = 0$

(b) $7x^3 = 2x^2$

(c) $x^3 - 14x^2 + 48x = 0$

(d) $x^3 + x^2 - 25x - 25 = 0$

Exit ticket: Solve $14x^4 - 5x^2 - 1 = 0$