1. Solve the following equations by factoring

(a). $x^2 - x - 2 = 0$

(b). $x^2 - 5x = -6$

2. Solve the following equations by using the quadratic formula

(a). $3x^2 + 5x - 12 = 0$

(b). $2x^2 - 5x - 2 = 0$

3. Solve the following equations using the method of your choice.

(a). $3x^2 - 24x + 36 = 0$

(b). $7x^2 = -49x$

3. (Continued) Solve the following equations using the method of your choice.

(c). $3x(2x-1)=30$

(d). $4x^2-4x=-1$

(e). $x^2-3x-5=0$

(f). $x^2-x+7=0$

(g). $x^4-5x^2+4=0$
[Hint: How would you factor z^2-5z+4?
What is z in your equation?]

(h). $-x^2-2x+2=0$

1. (a). $2,-1$ **(b).** $3,2$ **2. (a).** $\frac{4}{3},-3$ **(b).** $\frac{5+\sqrt{41}}{4},\frac{5-\sqrt{41}}{4}$ **3. (a).** $6,2$ **(b).** $0,-7$ **(c).** $\frac{5}{2},-2$
(d). $\frac{1}{2},\frac{1}{2}$ **(e).** $\frac{3+\sqrt{29}}{2},\frac{3-\sqrt{29}}{2}$ **(f).** No Solution **(g).** $1,-1,2,-2$ **(h).** $-1+\sqrt{3},-1-\sqrt{3}$

HW: Section 2.1, p. 134: #1-31(odd), 39, 41, 45, 49, 51, 53, 55