

*"You don't learn to walk by following the rules.  
You learn by doing, and by falling over."  
-Richard Branson*

1. Factor into linear factors whenever possible. Then solve.

(a)  $x^2 + 2x + 1 = 0$

(a)  $x^2 + 6x + 8 = 0$

(b)  $x^2 - 2x - 24 = 0$

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

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

(e)  $x^2 - 4 = 0$

(f)  $9x^2 - 16 = 0$

(g)  $x^3 + 8 = 0$

2. Solve.

(a)  $\frac{1}{x-3} = 2$

(a)  $\frac{2x-1}{2} + \frac{-1}{x-2} = 0$

(b)  $\frac{1}{x+1} + \frac{2}{x-1} = -1$