Fall 2012: Final A for 2:30 class

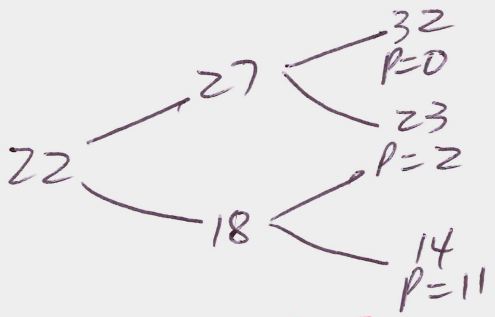
P5

$0-20: E(T_C) = .35$; $r^* = 1 - \frac{(1-.35)(1-.2)}{1-.4} = +0.1333$

$20-40: E(T_C) = .7(35) = .245$; $r^* = 1 - \frac{(1-.245)(1-.2)}{1-.4} = -0.0067$

$\Rightarrow$ optimal interest = 20+15

P6 K=25



$S=27: \Delta = \frac{0-2}{32-23} = -0.22222$

$B = \frac{2-(-.22222)(23)}{1.02} = 7.0407$

$P = 27(-.22222) + 7.0407 = 1.0407$

$S=18: \Delta = \frac{2-11}{23-14} = -1$

$B = \frac{11-(-1)(14)}{1.02} = 24.752$

$P = 18(-1) + 24.752 = 6.7524$

$t=0: \Delta = \frac{1.0407 - 6.7524}{27-18} = -0.6346$

$B = \frac{6.7524 - (-.6346)18}{1.02} = 17.996$

$P = 22(-.6346) + 17.996 = 4.03$