

Spring 2013 Final - 1:00A

P5 | $100 - 150: E(T_c) = .75 \times .4 = .3$

$$+12 \left(r^* = 1 - \frac{(1-.3)^{+10} (1-.15)^{+4}}{(1-.35)^{+4}} \right) = .0846 \text{ (30)}$$

$150 - 200: E(T_c) = .15(.4) = .06$

$$+12 \left(r^* = 1 - \frac{(1-.06)^{+10} (1-.15)^{+4}}{(1-.35)^{+4}} \right) = -.2292 \text{ (30)}$$

\Rightarrow optimal interest = $150 + 15$