

Spring 2013 Final - 1:00 A

P3]
$$NPV = -100 - 4 + \left(\frac{15}{r-0.02} \right) \left(1 - \left(\frac{1.02}{1+r} \right)^{26} \right) (1+r)^{\frac{5}{12}}$$

$$r = 1 + 1.2(6)$$

P4]
$$C = S N(d_1) - PV(K) N(d_2)$$

$$S = \frac{4}{r} \left(1 - \left(\frac{1}{1+r} \right)^5 \right) \left(\frac{1}{1+r} \right)^5$$

$$r = 1 + 1.3(6)$$

$$d_1 = \frac{\ln \left(\frac{S}{PV(K)} \right) + \frac{1}{2} \sigma^2 \sqrt{5}}{\sigma \sqrt{5}}$$

$$d_2 = d_1 - \sigma \sqrt{5}$$

$$PV(K) = \frac{K}{(1.05)^5}$$

+1 \Rightarrow look up $N(\cdot)$ on tables or using Excel

