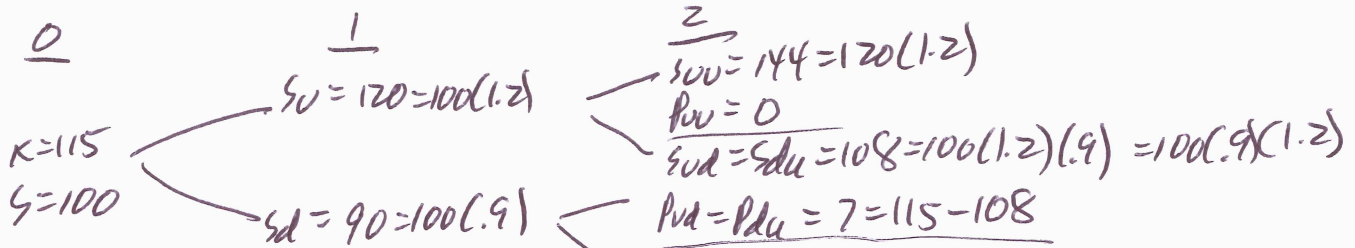


Quiz A for 1:00 Class: 04/10/13

Name Key

Assume that Accidental Petroleum's stock price currently equals \$100 per share and that its stock price will rise 20% or fall 10% each of the next two years. If the risk-free interest rate is 2% per year, what is the value today of a put on Accidental with a strike price of \$115 that expires in two years?

Wall Street Journal Questions are on the back of this page.



$$\Delta u = \frac{0 - 7}{144 - 108} = -0.1944 \quad (5)$$

$$B_u = \frac{7 - (-0.1944)(108)}{1.02} = 27.451 \quad (5)$$

$$P_u = 120(-0.1944) + 27.451 = 4.1176 \quad (5)$$

$$\Delta d = \frac{7 - 34}{108 - 81} = -1 \quad (5)$$

$$B_d = \frac{34 - (-1)(81)}{1.02} = 112.7451 \quad (5)$$

$$P_d = 90(-1) + 112.7451 = 22.7451 \quad (5)$$

$$\Delta = \frac{4.1176 - 22.7451}{120 - 90} = -0.6209 \quad (9)$$

$$B = \frac{22.7451 - (-0.6209)(90)}{1.02} = 77.0857 \quad (6)$$

$$P = 100(-0.6209) + 77.0857 = 14.9942 \quad (5)$$