Quiz A: 4/25/12   Name & Time _____

Quiz: Set up the calculations needed to determine whether Astro Mining should build the factory.

Astro Mining Inc. has an opportunity to invest $500,000 in a new factory that will generate cash flows over the next four years that have a present value of $115,000 and will generate cash flows over its 15-year life that have an expected present value equal to $475,000. If the project's cash flows fall short of expectations, the factory can be sold for $450,000 any time over the next four years. The standard deviation of returns on the factory is expected to equal 35% over its 15-year life. However the standard deviation will be much higher at 53% over the first four years of its life. This compares to a standard deviation of returns on the firm as a whole of 29%. The return on Treasuries varies with maturity as follows: 1-year = 0.173%; 2-year = 0.278%; 3-year = 0.404%; 4-year = 0.631%; 5-year = 0.852%; 10-year = 1.976%; 15-year = 2.484%.

Note: Bonus WSJ Questions on back of page