Question#8835

KF can obtain an option on a site for $100,000 on 31 Dec 2012. The option would give KF the right to purchase the site for $2.6million on 31 Dec 2017. It is estimated that similar sites will then have a market value of $3 million. Calculate the present value of purchasing the option now and compare it with the present value of purchasing the land outright later on. Which is the better alternative? Why

**Answer:**

1) $PV_1 = \frac{2,6}{(1+i)^5}$
2) $PV_2 = \frac{3}{(1+i)^5}$
3) If $PV_1 + \$100,000 < PV_2$ then better alternative is to buy option
   If $PV_1 + \$100,000 > PV_2$ then better alternative is to purchase the site in 2017 without option
   Present value depends on interest rate, which is used in the market