Su 2012

Key to 9:15a +6 4/:15a

3. $\times 3\left(NPV = -5{,}000{,}000^{+3} + \overbrace{\left(\frac{150{,}000^{+3}}{r(\frac{1}{12}) - .01_{+3}}\right)\left(1-\left(\frac{1.01}{1+r(\frac{1}{12})}\right)^{65\,+9}\right)}^{+6}\overbrace{\left(\frac{1}{1+r(\frac{1}{12})}\right)^{7\,+9}}^{+6}\right.$ (42)

$+6\left(r(1) = .0005^{+3}1 + 1.5^{+6}(.07)^{+3} = .10551\right.$ (18)

$+6\left(r(\frac{1}{12}) = (1+r(1))^{\frac{1}{12}\,+9} - 1\right.$ (14)

4. $+3\ C = S(N(d_1)) - PV(K)\,N(d_2)$

$+3\ d_1 = \frac{\ln\left(\frac{S}{PV(K)}\right)}{\sigma\sqrt{T}} + \frac{\sigma\sqrt{T}}{2}$

$+3\ d_2 = d_1 - \sigma\sqrt{T}$

$S = \overbrace{\left(\frac{50{,}000^{+1}}{r(\frac{1}{12})}\right)\left(1-\left(\frac{1}{1+r(\frac{1}{12})}\right)^{36\,+3}\right)}^{+3}\overbrace{\left(\frac{1}{1+r(1)}\right)^{3\,+3}}^{+3}$ (13)

$+3\left(r(1) = .0005^{+1}1 + 1.9^{+3}(.07)^{+1} = .13351\right.$ (8)

$+3\left(r(\frac{1}{12}) = (1+r(1))^{\frac{1}{12}\,+3} - 1\right.$ (6)

$+3\left(PV(K) = \frac{2{,}000{,}000^{+6}}{(1.0033_{+9})^{3\,+6}}\right.$ (24)

$\sigma = .58^{+9}$

$T = 3^{+6}$

$N(d_1)$ & $N(d_2)$ from tables or Excel