

6. The current exchange is $\frac{\$1}{¥7} = p_0$

$$B_{¥}(0, \frac{3}{2}) = (1.04)^{-\frac{3}{2}} ; B_{\$}(0, \frac{3}{2}) = (1.02)^{-\frac{3}{2}}$$

Forward Price:

$$F(0, \frac{3}{2}) = \$ \frac{1}{7} \left(\frac{1.02}{1.04} \right)^{\frac{3}{2}} 1200 = \cancel{\$ 1200} \\ 166.51$$

7. Determine cost of ¥1200 at the maturity date using $p_{\frac{3}{2}} = \frac{1}{6}$.

$$\cancel{F} F(\frac{3}{2}, \frac{3}{2}) = \frac{1}{6} 1200$$

The value of the long position at maturity is

$$F(\frac{3}{2}, \frac{3}{2}) - F(0, \frac{3}{2}) = \left\{ \frac{1}{6} - \frac{1}{7} \left(\frac{1.02}{1.04} \right)^{\frac{3}{2}} \right\} 1,200$$

$$\cancel{= 25.95} = 33.49$$

~~175.51~~