

**ACCOUNTANCY 422  
SUPPLEMENTAL PROBLEM  
INTEREST RATE SWAP**

On January 1, 2005 the Allen Company signed a note with a notional value of \$90 million. The note has a variable interest rate equal to the 30-day LIBOR, which is paid on the first day of each month. The note has a balloon payment that calls for the principal to be paid in full at the end of ten years. On the same date that the note was signed, Allen executed an interest rate swap for the purpose of hedging the exposure to interest rate volatility to variable rate debt. The swap has a notional amount of \$90 million and a term of ten years. From the company's perspective, the swap is a receive-variable, pay-fixed swap. The fixed leg of the swap is 7.75% and the variable leg is equal to 30-day LIBOR. The swap settles on the first day of each month. Selected 30-day LIBOR's for the year 2005 follow:

<u>Date</u>	<u>30-Day LIBOR</u>
April 1, 2005	7.60%
May 1, 2005	7.50%
June 1, 2005	7.55%
September 1, 2005	7.95%
October 1, 2005	8.10%
November 1, 2005	7.90%
December 1, 2005	7.70%

On December 31, 2005 you receive confirmation from the bank that the valuation of the swap is \$5,000,000. On December 31, 2006 you receive confirmation from the bank that the valuation of the swap is \$4,700,000.

***Required:***

- a. Record the journal entry required on May 1, 2005 with respect to the swap.
- b. Calculate the net cash flow on May 1, 2005 for the swap and the interest on the note.
- c. Calculate the net cash flow on July 1, 2005 for the swap and the interest on the note.
- d. Record the journal entry required on October 1, 2005 with respect to the swap.
- e. Record the journal entry on December 31, 2005 for interest on the note.
- f. Record the journal entry on December 31, 2005 for the swap assuming the swap qualifies for hedge accounting.
- g. Record the journal entry on December 31, 2005 for the swap assuming the swap does not qualify for hedge accounting.
- h. Record the journal entry on December 31, 2006 for the swap assuming the swap does not qualify for hedge accounting.