15.514 Quiz Solution

1. **Marketable Securities (18 points, 6 points for each part)**
The following information relates to the investment securities held by Trimex Corporation. The abbreviations used in the chart are HTM (Held to Maturity Securities), TR (Trading Securities), and AFS (Available for Sale Securities).

					Marketable Value 12/31		
Security	Acquisition Date	Acquisition Cost	Date Sold	Selling Price	2001	2002	2003
A (HTM)	3/13/01	$35,000	-	-	$38,000	$30,000	$33,000
B (TR)	6/24/01	65,000	5/27/03	$70,000	60,000	67,000	-
C (AFS)	10/3/01	100,000	6/30/03	105,000	102,000	98,000	-

Trimex closes its books on December 31 each year. Asume tax rate is 40%.

What's the net effect on net income, other equity, and deferred tax?

A) HTM - leave at acquisition cost, same amount $35,000 each year. **No effect** on net income, other equity, and deferred tax.

B) TR - mark to market each year. Gain and losses are recorded under retained earnings as part of net income. Other equity account is **not affected**.

Date	Cash	Marketable Securities	Adj. To M.S.	=	Tax Payable	Deferred Tax Liability	Retained Earnings (Net Income)
6/24/01	(65,000)	65,000					
12/31/01			(5,000)			**(2,000)**	**(3,000)**
12/31/02			7,000			**2,800**	**4,200**
5/27/03	70,000	(65,000)	(2,000)		2,000	**(800)**	**1,800**
EB		0	0			0	3,000

C) AFS

Date	Cash	Marketable Securities	Adj. To M.S.	=	Tax Payable	Deferred Tax Liability	Other Equity	R/E (Net Income)
10/3/01	(100,000)	100,000						
12/31/01			2,000			**800**	**1,200**	
12/31/02			(4,000)			**(1,600)**	**(2,400)**	
6/30/03	105,000	(100,000)	2,000		2,000	**800**	**1,200**	**3,000**
EB		0	0			0	0	3,000

2. Long-term Liabilities (20 Points, 10 points for part a, 5 points for part b, 5 points for part c)

a) $25,200,000 = .63 x $40,000,000 of cash must be raised to retire the old issue.
Issue of new bonds (dollars in thousands)

Cash (A)	= Bonds Payable (L)	Retained Earnings (SE)
+25,200	+25,200 Bonds Payable-9 Percent	
(25,200)	(40,000)	14,800 Gain on Bond Retirement
(5,920)		(5,920) =0.40 x $14,800. Income Tax Expense

b) Income increases by $8,880,000 [= (1 - .40) x $14,800,000], or by 88% (= 8,800/$10,000) to $18.8 million. Retained earnings increases by $8,880,000.

c) Debt-equity ratio (in thousands):

Before: (5,000 + 40,000)/35,000 = 1.29
After: (5,000 + 25,200)/(35,000 + 8,880) = 30,200/43,800 = 0. 69

3. Leases (7 points. No point deducted if fail to deduct the current portion of the liability)

Year	Amount	Discount Factor	Present Value
2002	85,882	0.9025	77,511
2003	88,524	0.8146	72,108
2004	86,302	0.7352	63,446
2005	86,000	0.6635	57,061
2006	82,954	0.5988	49,675
2007			218,684

Present Value of all future payments	538,485
Less: Current portion	77,511
Increase in Non Current Liabilities	460,974