Quiz A for 2:30 Class: 1/~~26~~ 28/13 Name Key

Assume that you can buy or sell (or short-sell) any of the following securities:

Risk-free bonds: bonds that mature one year from today earn 1.3% per year and bonds that mature two years from today earn 2.4% per year.

Risky securities:

	Prices Today:		Payoff one year from today if the economy is:		Payoff two years from today if the economy is:	
Security	Bid	Ask	Strong	Weak	Strong	Weak
Second Apple	$760	$765	$350	$50	$1100	$100
Market	$275	$280	$150	$0	$500	$0

What set of transactions today will generate an arbitrage profit for you today. In your answer list all transactions required today and all individual and total cash flows today, a year from today, and two years from today. Use a "+" for an inflow of cash and a "-"for an outflow of cash. Note: I recommend setting up a table like is in the notes, but this is not required.

Wall Street Journal Questions are on the back of this page.

Eg- portfolio = 2 Market + PV(50@t=1) + PV(100@t=2)

✓ Price to buy = $2 \times 280 + \frac{50}{1.013} + \frac{100}{(1.024)^2} = 704.73 < 760$ (560, 49.36, 95.37)

Price to sell = $2 \times 275 + \frac{50}{1.013} + \frac{100}{(1.024)^2} = 694.73$

Trans	CF_0	CF_1 S	CF_1 W	CF_2 S	CF_2 W
+2 Buy 2 Mkt	-560^{+2}	$+300^{+2}$	0^{+2}	$+1000^{+2}$	0^{+2}
+2 Buy 1-year risk-free	-49.36^{+2}	$+50^{+2}$	$+50^{+2}$	0 +2 0	
+2 Buy 2-year risk-free	-95.37^{+2}	0 +2 0		$+100^{+2}$	$+100^{+2}$
+2 Short SA	$+760^{+2}$	-350^{+2}	-50^{+2}	-1100^{+2}	-100^{+2}
Total	$+55.27^{+2}$	0 +2 0		0 +2 0	