

**Quiz: 1/25/12**

Name &amp; Class Time \_\_\_\_\_

Assume that you can buy or sell risk-free bonds that mature for any dollar amount either a year from today or two years from today. All risk-free bonds pay an annual interest rate of 4%. Assume also that you can buy or sell the following securities at the market prices listed:

<u>Security</u>	<u>Market Price</u>	Payoff one year from today if the economy is:		Payoff two years from today if the economy is:	
		<u>Strong</u>	<u>Weak</u>	<u>Strong</u>	<u>Weak</u>
X	70	100	50	0	0
Z	160	0	0	200	150
ETF	445	150	100	400	300

- What portfolio of securities will generate cash flows identical to those generated by the ETF?
  - What is the no-arbitrage price of the ETF?
- Note: Feel free to answer parts “c” and “d” with a table
- What set of transactions today will generate an arbitrage profit today?
  - What cash flows (each trade and total) will your transactions produce today, a year from today, and two years from today?