

Questions on Module 1 topics from the Fall 2019 midterm exam

What is the total return during the year to an investment strategy that passively tracks a *value-weighted* index of the below stocks?

Stock symbol	Shares outstanding	Price, start of year	Price, end of year	Dividend per share during year
ABC	50m	\$10	\$14	\$2
XYZ	20m	\$50	\$45	\$2

- A) 5%
- B) 8%
- C) 16%**
- D) 27%

Refer again to the table in the previous question. Suppose a mutual fund starts the year with one share of each of the stocks listed there. The mutual fund has no other assets or liabilities, and it has 10 shares outstanding. During the year, the fund charges fees to its investors equal to 5% of the beginning-of-year assets. It distributes to its investors the dividends received on the two shares of stock that it owns, but it does not sell either of the shares. What is the NAV of the fund at the end of the year?

- A) \$5.60**
- B) \$5.90
- C) \$6.00
- D) \$6.30

Which feature of the ETF structure is shared by open-end mutual funds, but not by closed-end funds?

- A) Shares of the fund are traded on an exchange.
- B) The share price is always exactly equal to the fund's NAV.
- C) The fund's assets under management (AUM) can change over time.**
- D) Transactions with the fund are often conducted “in-kind.”

Suppose a stock's price is currently \$100. You expect that its dividend during the *next* year will be \$5.00. You also judge that the right discount rate r_E for these dividends is 10%. What annual dividend growth rate is necessary to explain the stock's current price, according to the constant-growth (or “Gordon”) dividend discount model?

- A) -2%
- B) 0%
- C) 5%**
- D) 10%

A firm has the following information: $r_{Wacc} = 7\%$, Tax rate = 20%, Shares outstanding = 1m, Net debt = \$100m. You judge that this firm will realize \$6m next year in free cash flow to the firm (FCFF), and that this will grow at 4% per year thereafter. What intrinsic enterprise value would you calculate for the firm?

- A) \$55m
- B) \$80m
- C) \$171m
- D) \$200m**

How would you calculate the firm's intrinsic *share price* from on your previous answer?

- A) Subtract \$100 million then divide by 1 million.**
- B) Divide by 1 million then subtract \$100 million.
- C) Discount the FCFF using r_E
- D) Calculate free cash flows to equity (FCFE) and discount at r_{Wacc} .

Which of these would be considered a *small-cap growth stock* compared to the others?

Company	Share price	# shares	Book value of equity
A	\$60	100m	\$12b
B	\$20	200m	\$8b
C	\$20	300m	\$3b
D	\$10	400m	\$2b