

The CAPM (*capital asset pricing model*) assumes:

- All assets can be traded
- Investors are risk-averse
- Investors have homogeneous expectations

Answer the following problems using the *Capital Asset Pricing Model (CAPM)* where the *Expected Return (R)* for a portfolio is:

$$R = r_f + B(r_m + r_f)$$

and where,

r_f = Risk free return

r_m = Expected return on the market portfolio

B = Beta

[1] The CAPM (*capital asset pricing model*) below is:

$$R = r_f + B(r_m + r_f)$$

where,

$$r_f = 4.2\%$$

$$Y_m = 10.5\%$$

$$B = 1.6$$

What is the *Expected Return (R)* for the portfolio?

[2] The CAPM (*capital asset pricing model*) below is:

$$R = r_f + B(r_m + r_f)$$

where,

$$r_f = 4.8\%$$

$$Y_m = 11.0\%$$

$$B = 0.9$$

What is the *Expected Return (R)* for the portfolio?

[3] The CAPM (*capital asset pricing model*) below is:

$$R = r_f + B(r_m + r_f)$$

where,

$$r_f = 5.0\%$$

$$Y_m = 9.8\%$$