Note: There are no points for solving this problem. All points are for setting up the equations, plugging in the relevant numbers, and stating what you want to solve for (if you are not simply solving the equation).

Assume that capital markets are perfect and that you currently own $100,000 of stock in Election Spending Corporation. Assume also that Election has total shares outstanding worth $10 million and that it has no outstanding debt. The beta of Election's stock is 1.2 and the expected return on Election's stock is 12.6%. Finally, assume that Election has announced that they intend to issue $4 million of debt with a beta of 0.2 and a cost of capital of 4.6%. Election will use the $4 million to repurchase shares.

a. If you do nothing, how much will your stock be worth after Election's debt issue/stock repurchase?
b. What will the expected return on your shares be after the debt issue/stock repurchase?
c. What will the beta be on your shares after the debt issue/stock repurchase?
d. When Election issues the debt and repurchases the shares, what changes will you need to make so that the risk you face and the expected return you will earn remains unchanged?

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

a. $100,000

b. \( E(R_E) = 12.6 + \frac{4}{6}(12.6 - 4.6) \)

c. \( \beta_E = 1.2 + \frac{4}{6}(1.2 - 0.2) \)

d. Sell $40,000 of stock to buy $40,000 of the new debt.

Alternative solution:

b. \( 12.6 = \left( \frac{4}{6 + 4} \right) 4.6 + \left( \frac{4}{6 + 4} \right) E(R_E) \)

c. \( 1.2 = \left( \frac{4}{6 + 4} \right) 0.2 + \left( \frac{4}{6 + 4} \right) \beta_E \)