Assume you have just been hired as a business manager of PizzaPalace, a regional pizza restaurant chain. The company's **EBIT** was **$50 million** last year and is not expected to grow. The firm is currently financed with all equity, and it has **10 million** shares outstanding. When you took your corporate finance course, your instructor stated that most firms' owners would be financially better off if the firms used some debt. When you suggested this to your new boss, he encouraged you to pursue the idea. As a first step, assume that you obtained from the firm's investment banker the following estimated costs of debt for the firm at different capital structures:

Percent Financed with Debt, w_d	r_d
0%	—
20	8.0%
30	8.5
40	10.0
50	12.0

If the company were to recapitalize, then debt would be issued and the funds received would be used to repurchase stock. PizzaPalace is in the 40% state-plus-federal corporate tax bracket, its beta is 1.0, the risk-free rate is 6%, and the market risk premium is 6%.

a. **Using the free cash flow valuation model, show the only avenues by which capital structure can affect value.**

b.

(1) **What is business risk? What factors influence a firm's business risk?**

(2) **What is operating leverage, and how does it affect a firm's business risk? Show the operating break-even point if a company has fixed costs of $200, a sales price of $15, and variable costs of $10.**