$\qquad$

Assume that Amorgy Inc. has a 25\% of earning an EBIT of \$100 million per year, a 30\% chance of earning an EBIT of $\$ 175$ million per year, a $35 \%$ chance of earning an EBIT of $\$ 225$ million per year, and a $10 \%$ chance of earning an EBIT of $\$ 300$ million per year. Assume also that Amorgy's current interest expense equals $\$ 150$ million. Amorgy is considering issuing additional $\$ 100$ million of permanent debt at a $10 \%$ interest rate and using the proceeds to repurchase common stock.
a. How does the value of Amorgy change if markets are perfect? Note: Answer is a number.
b. How does the value of Amorgy change if the only market imperfection is corporate taxes and the corporate tax rate equals $35 \%$ ? Note: Answer is a number.
c. How does the value of Amorgy change if the only market imperfections are corporate and personal taxes? Assume the corporate tax rate equals $35 \%$, the personal tax rate on equity income equals $20 \%$, and the personal tax rate on interest income equals $30 \%$. Note: Answer is a number.
d. How would your answer to " $c$ " change if we also assume the presence of stockholder-bondholder conflict? Note: All you need to do is indicate the direction of the change.
e. How would your answer to " $d$ " change if we also assume bankruptcy costs exist? Note: All you need to do is indicate the direction of the change.

