Session 26: Post Class tests

1. Rutherford Inc. is a publicly traded company that reported net income of $100 million in the most recent year, after depreciation of $50 million. The firm reported capital expenditures of $75 million and an increase in working capital of $20 million. If total debt at Rutherford increased by $15 million during the course of the year, how much could Rutherford have afforded to pay out in dividends during the course of the year?
   a. $5 million
   b. $20 million
   c. $30 million
   d. $55 million
   e. $70 million

2. In the last example, what would your answer be if working capital decreased by $20 million and total debt decreased by $15 million?
   a. $20 million
   b. $30 million
   c. $60 million
   d. $80 million
   e. $95 million

3. Alibaba Inc. is an all equity-funded company that generated $80 million in net income during the course of the most recent year. The firm had capital expenditures of $60 million, depreciation of $30 million and no working capital investments. If the cash balance at the company increased by $15 million during the course of the year, how much cash did the company return to its stockholders?
   a. $5 million
   b. $20 million
   c. $35 million
   d. $65 million
   e. $95 million
   f. None of the above

4. Riga Bank has $2 billions in loans outstanding and a book value of equity (and regulatory capital) of $90 million. The bank expects its loan base to grow 25% next year and would like to raise its regulatory capital ratio to 6%. If Riga expects to generate net income of $100 million next year, how much can it afford to pay in dividends?
   a. Nothing
   b. $40 million
   c. $60 million
   d. $75 million
   e. None of the above

5. Tanaka Inc. is an under levered firm that believes that wants to increase its debt ratio over time. Which of the following dividend policies will help the most in accomplishing that objective?
a. Return more cash than you have available as potential dividends (Cash returned > FCFE)
b. Return less cash than you have available as potential dividends (Cash returned < FCFE)
c. Return cash roughly equal to potential dividends (Cash returned = FCFE)
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1. **e. $70 million.** FCFE = 100 + 50 - 75 - 20 + 15 = 70 million
2. **d. $80 million.** FCFE = 100 + 50 - 75 + 20 - 15 = 80 million
3. **c. $35 million.** FCFE = 80 + 30 - 60 = 50 million. Since the cash balance increased by $15 million, the company must have paid out $15 million less than the FCFE = $50 - 15 = $35 million.
4. **b. $40 million.**
   - Loans outstanding next year = $2 billion (1.25) = $2.5 billion
   - Expected regulatory capital next year = $2.5 billion * .06 = $150 million
   - Increase in regulatory capital = $150 million - $90 million = $60 million
   - FCFE = Potential Dividend = $100 million - $60 million = $40 million
5. **a. Return more cash than you have available as potential dividends (Cash returned > FCFE)** Returning more cash will lower your equity, relative to your debt, and increase your debt ratio.