1. According to the textbook, the role(s) of capital is to:

   A. provide a cushion against failure risk.
   B. provide funds needed to charter, organize, and operate a bank.
   C. promote public confidence.
   D. All of the options are correct.

2. Under market value accounting methods, Banks
   A. must write down the value of their assets to fully reflect market values.
   B. have a great deal of discretion in timing the write downs of problem loans.
   C. must conform to regulatory write-down schedules.
   D. have an incentive to fully reflect problem assets as they become known.

3. What is the impact on economic capital of a 25 basis point decrease in interest rates if the bank is holding a 20-year, fixed-rate, 11 percent annual coupon bond selling at a par value of $100,000?
   A. A decrease of $250.
   B. An increase of $250.
   C. An increase of $2,024.
   D. A decrease of $1,959.

4. The Basel capital requirements are based upon the premise that
   A. banks with riskier assets should have higher capital ratios.
   B. banks with riskier assets should have lower capital ratios.
   C. banks with riskier assets should have lower absolute amounts of capital.
   D. banks with riskier assets should have higher absolute amounts of capital.

5. Which of the following is not a category of capital under Basel III?
   A. Tier III capital.
   B. Tier II capital.
   C. Common Equity Tier I.
   D. Total risk-based capital.

6. Which of the following assets is deducted from Common Equity Tier I capital?
   A. Trademarks.
   B. Goodwill.
   C. Patents.
   D. Bank premises.

7. Use the following information

Securities (at par)	$250	Deposits	$975
Loans (at par)	$760	Capital	$35

If problem loans reduce the market value of the loan portfolio by 25 percent, what is the value of regulatory defined (book value) capital?

A. $35 million.
B. -$155 million.
C. $7 million.
D. -$7 million.

8. Use the following information

Cash and Treasury securities	$100 million
Fed Funds Sold	$100 million
Residential Mortgages 1-4 family	$200 million
Commercial Loans	$600 million

Note: The residential mortgages all have a loan-to-value of between 60 and 80 percent.

What is the amount of risk-adjusted assets?

A. $1,000 million.
B. $720 million.
C. $900 million.
D. $600 million.

9. Sigma Bank has the following balance sheet in millions of dollars. Unless mentioned otherwise, all assets are associated with corporate customers (not governments or sovereigns). Values are in millions of dollars.

Cash	$40	Deposits	$370
Municipal General Obligation Bonds (0)	$60		
Residential Mortgages 1-4 family (80% - 90% LTV) (50%)	$100	Perpetual Preferred Stock	$20
Commercial loans BB + rated (100%)	$200	Equity	$10
Total Assets	$400		$400

Off balance sheet contingent liabilities

$40 million direct-credit substitute standby letters of credit issued to a U.S. corporation.	(20%)
$40 million commercial letters of credit issued to a corporation	(50%)

Off-balance sheet derivatives

$200 million 10-year interest rate swaps	(4%)
$100 million 2-year forward DM contracts	(1%)

What is the minimum required Tier I and Total risk-based capital for the on-balance-sheet assets in order for the bank to be adequately capitalized?

A. $8 million; $8 million.
B. $16.87 million; $16.87 million.
C. **$17.22 million; $22.96 million.**
D. $22.96 million; $28.70 million.

10. If the bank expects its ROA to be .45% and the bank does *not* wish to change its dividend payout ratio from 35%, how much new equity capital (as a percent of total assets) must the bank issue to support the growth in assets?
    A. 0.2925%
    B. 2.935%
    C. 0.1075%
    D. 1.075%

11. Calculation question

Third Bank has the following balance sheet (in millions), with the risk weights in parentheses.

Assets		**Liabilities and Equity**	
Cash (0%)	$21	Deposits	$176
OECD interbank deposits (20%)	25	Subordinated debt (5 years)	2
Mortgage loans (50%)	70	Cumulative preferred stock	2
Consumer loans (100%)	70	Equity	5
Reserve for loan losses	(1)		
Total assets	$185	Total liabilities and equity	$185

The cumulative preferred stock is qualifying and perpetual. In addition, the bank has $30 million in performance-related standby letters of credit (SLCs) to a public corporation, $40 million in two-year forward FX contracts that are currently in the money by $1 million, and $300 million in six-year interest rate swaps that are currently out of the money by $2 million. Credit conversion factors follow:

Performance-related standby LCs	50%
1- to 5-year foreign exchange contracts	5%
1- to 5-year interest rate swaps	0.5%
5- to 10-year interest rate swaps	1.5%

a. What are the risk-adjusted on-balance-sheet assets of the bank as defined under the Basel Accord?

b. To be adequately capitalized, what are the CET1, Tier I, and total capital required for both off- and on-balance-sheet assets?

c. Disregarding the capital conservation buffer, does the bank have enough capital to meet the Basel requirements? If not, what minimum CET1, additional Tier 1, or total capital does it need to meet the requirement?

d. Does the bank have enough capital to meet the Basel requirements, including the capital conservation buffer requirement? If not, what minimum CET1, additional Tier 1, or total capital does it need to meet the requirement?