

**BAT**

# Sample Questions

2012

## Sample Questions

- 1) Economics
- 2) Financial Statements Analysis
- 3) Corporate Valuation
- 4) Investment Banking
- 5) Financial Markets
- 6) Investment Management
- 7) Verbal
- 8) Math
- 9) Analytical Reasoning
- 10) Situational & Ethical Judgment

1

You have just been transferred to Sydney and cover Australia and New Zealand on the sovereign research desk. Australia and New Zealand operate under a free trade agreement. No barriers to trade exist, and both currencies float. In this environment, an increase in expected inflation in New Zealand would most likely cause what effect?

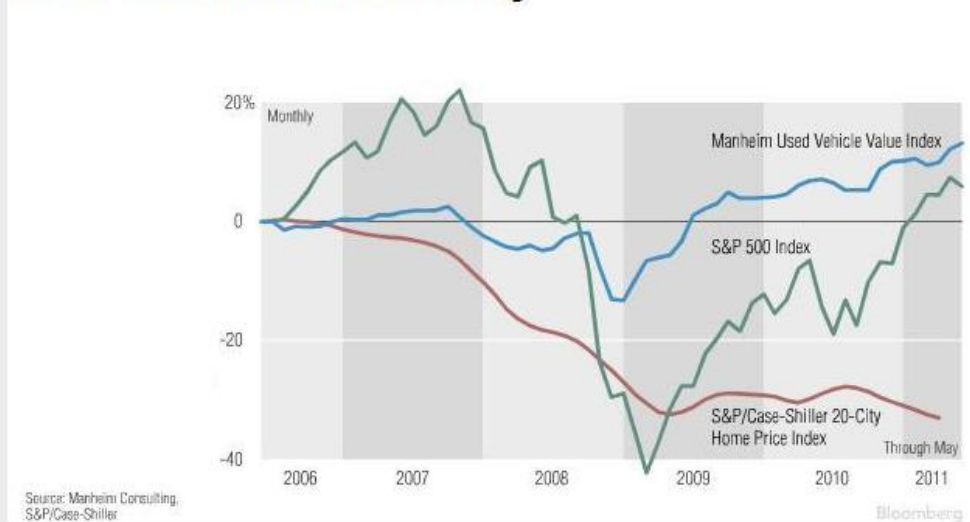
Choose one answer.

- An increase in the New Zealand Dollar versus the Australian Dollar
- An increase in exports from New Zealand to Australia
- A decline in the New Zealand Dollar versus the Australian Dollar
- An increase in imports to New Zealand from Australia

2

As a junior equity analyst at UBS covering the Automotive sector, you come across the Chart of the Day on Bloomberg as shown below. The data shows that used vehicle prices have improved over the last two years, while home prices have continued to fall. Which of the following pieces of data is least likely to explain this change?

## Used-Car Values Beat U.S. Home, Stock Prices: Chart of the Day



Choose one answer.

- Home foreclosure activity has increased over the last two years.
- Tighter consumer lending standards have reduced demand for new homes and new cars.
- New housing inventory has fallen over the past two years.
- New vehicle inventories have fallen due to reduced production over the last two years.

3

On August 5, 2011, Standard & Poor's (S&P) downgraded U.S. government debt one notch to AA+ from AAA, a rating it held for over 70 years. In the aftermath of this downgrade, U.S. Treasury yields fell across the curve. Of the following choices, which is the most likely explanation for the decline in Treasury yields immediately following the downgrade?

Choose one answer.

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- Selling of Treasury holdings
- Bank recapitalization due to the downgrade
- Inflation expectations rose after the downgrade
- Risk aversion and flight to quality

## 2) Financial Statements Analysis

1

Pinnacle Entertainment is a gaming company with operations in the United States. As a result of increased competition and weakness in the Missouri market, the company took an impairment charge to write down the value of its three properties in the region.

How will this charge be reflected on the cash flow statement?

Choose one answer.

- A use of cash from discontinued operations
- A source of cash from operations
- A source of cash from financing
- A use of cash from investing

2

To reflect growing pessimism in a company's ability to collect on its customer accounts, ¥10 million in accounts receivable is written down.

Which of the following adjustments would offset the write-down in accounts receivable and put the company's balance sheet into parity?

Choose one answer.

- ¥10 million increase in Accounts Payable
- ¥10 million reduction in Cash
- ¥10 million reduction in Retained Earnings
- ¥10 million decrease in Other Comprehensive Income

3

An analyst would like to compare the profitability of two companies that have differing amounts of short-term and long-term debt.

Which of the following ratios is likely the most useful basis for objective comparison?

Choose one answer.

- Debt-to-Equity
- Return on Capital
- Return on Equity
- Return on Assets

### 3) Corporate Valuation

1

As an investment banking analyst, you are asked to perform a discounted cash flow analysis. Your associate provides you with the information below from the company's operating model and asks you to calculate the present value of the company's first five years of unlevered free cash flows assuming a 10% discount rate and a 40% tax rate.

What is the present value of the company's free cash flows in millions?

Fiscal Year (FY)	Projections (millions)				
	FY+1	FY+2	FY+3	FY+4	FY+5
Net Sales	€ 300.00	€ 374.10	€ 417.70	€ 466.50	€ 521.00
EBITDA	66.0	84.2	94.0	105.0	117.3
Depreciation & Amortization	10.0	12.5	15.0	17.5	20.0
Capital Expenditures	7.5	10.6	13.5	16.6	20.0
Net Change in Working Capital	0.0	0.0	0.0	0.0	0.0

Choose one answer.

- €201
- €179
- €242
- €168

2

As an analyst in the industrials group, you are analyzing the announced acquisition of Bucyrus by Caterpillar. Assuming that the current year is 2010, you estimate from equity research that Bucyrus' 2011 EBITDA will be \$537.5 million.

Based on this estimate and the press release provided below, calculate the multiple of EBITDA that Caterpillar paid for Bucyrus.

Caterpillar Inc. and Bucyrus International, Inc. announced today they have entered into an agreement under which Caterpillar will acquire Bucyrus International in a transaction valued at approximately \$8.6 billion (including net debt).

Under the terms of the transaction, Bucyrus shareholders will receive \$92 per share, \$7.6 billion in aggregate consisting of all cash. The transaction represents an implied premium of 32 percent to Bucyrus' share price as of November 12, 2010. Caterpillar will fund the acquisition through a combination of cash from the balance sheet, debt and up to \$2 billion in equity. The transaction is expected to close in mid-2011.

Choose one answer.

- 12.3x
- 14.1x
- 16.0x
- 17.9x

3

In its simplest form, the capital asset pricing model (CAPM) measures the expected risk premium of an individual stock relative to the overall market. The general equation is: Expected risk premium of stock = Beta x Expected risk premium on market in which Beta measures a stock's sensitivity to changes in the value of an overall market portfolio.

Which of the following best illustrates this Beta concept of correlation?

Choose one answer.

- The most popular videos on YouTube, an online video site, based on the number of hits
- Your performance on a standardized test with points rewarded for each correct answer
- Your final score on a course based on a scaled grading of you and your classmates' results over the semester
- Your choice of today's lottery numbers based on the past month's winning lottery results

## 4) Investment Banking

1

As an investment banking analyst, you are working on an M&A pitch for an upcoming client meeting. Your managing director feels the client is particularly sensitive to dilution and would not be interested in a transaction that was not accretive.

Based on the information provided in the table below, which of the following transactions would you recommend including in the presentation?

	Acquiror	Target A	Target B
Price	CNY 200.00	115.00	400.00
EPS	CNY 10.60	6.00	9.50

Choose one answer.

- A 100% stock acquisition of Target A
- A 100% stock acquisition of Target B
- A 100% debt-financed, all cash acquisition of Target A (assuming a 5% after-tax cost of debt)
- A 100% debt-financed, all cash acquisition of Target B (assuming a 5% after-tax cost of debt)

2

As an analyst in the equity capital markets group, you are working on a potential IPO. You have been asked to compare the percent ownership the existing shareholders will hold in the upcoming offering at various prices. Assuming that 25% of the company would be held by new shareholders after IPO if the company raises \$75 million at \$15 per share, which of the following represents the percent ownership that would be held by new shareholders after IPO if the company raised the same amount at an offer price of \$25 per share?

Choose one answer.

- 15.0%
- 16.7%
- 25.0%
- 41.7%



1

You are a junior treasury trader. The yield curve is currently positively sloped, with the spread between the 2-year and 10-year treasuries at 100 basis points.

Which of the following announcements by the Fed would most likely cause the 2s-10s spread to increase?

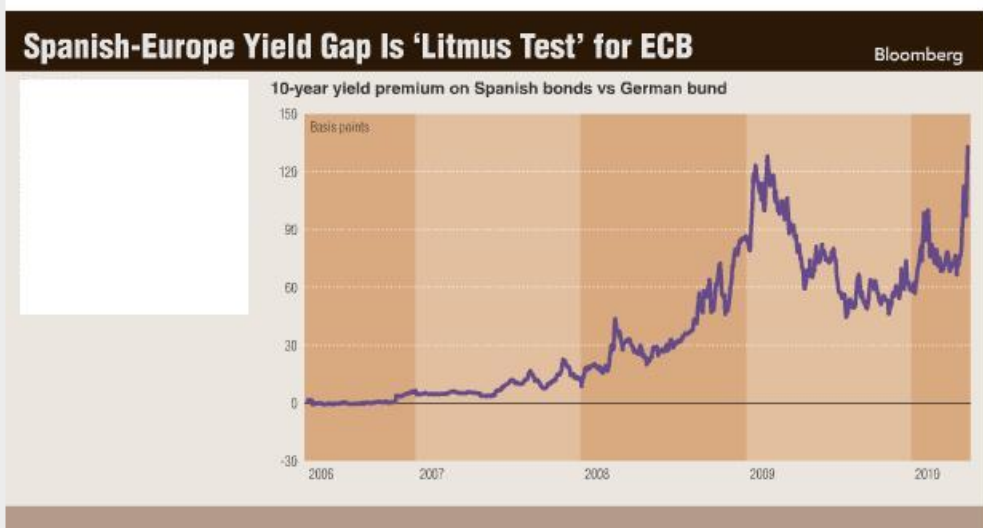
Choose one answer.

- Fed is raising short term interest rates to slow the economy
- Fed has changed its outlook from favorable to cautious regarding inflation
- Fed is buying 10-year notes in the open market
- Fed is buying 2-year notes in the open market

2

As a bond trader in Frankfurt, Germany, you see the Chart of the Day on Bloomberg below that plots the difference in yield between 10-year Spanish government bonds and 10-year German government bonds.

Which of the following explanations is the least likely explanation for the relationship depicted in this chart?

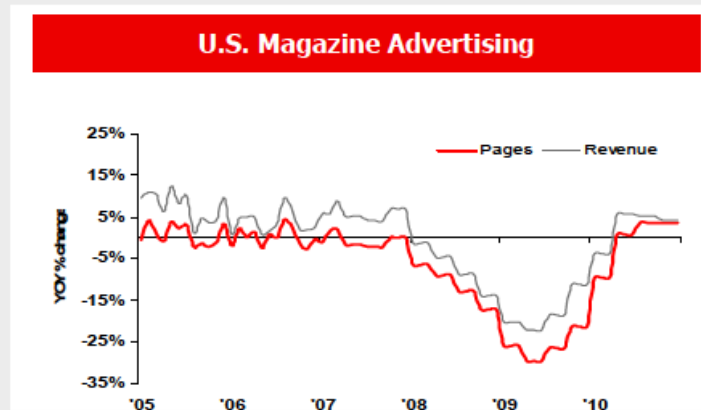


Choose one answer.

- Germany's government has implemented a balanced budget amendment in 2006 to be phased in over the next 5 years while Spain's budget deficit continues to increase.
- Spain's government has implemented a balanced budget amendment in 2006 to be phased in over the next 5 years.
- Greece, an EU member along with Germany and Spain, may have to be bailed out by the European Union and the International Monetary Fund.
- Spain's perceived credit rating has consistently declined over the last 5 years.

3

As a junior analyst at Bank of America Merrill Lynch in Equity Research covering the Paper and Forest Products sector, you are listening to Abitibi Bowater present at a conference, and notice the graph below, which shows year over year changes in U.S. magazine advertising. What can you best conclude from the data?



Choose one answer.

- Advertising revenue will continue to rise.
- Magazine pages and advertising revenue are cyclical.
- Magazine pages and advertising revenue will fall sharply soon.
- Magazine pages will continue to rise.

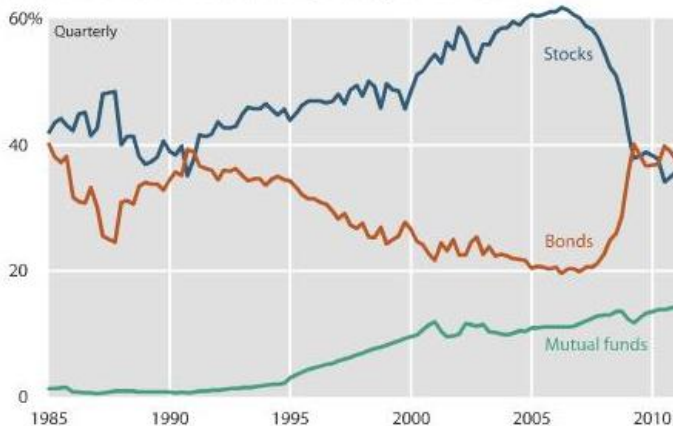
1

According to the Bloomberg Chart of the Day below, when U.S. pension funds change their allocation to stocks, which of the following is most strongly impacted?

## Pension Funds Pay Price for Shunning Stocks: Chart of the Day

Company pension funds are so reluctant to own stocks that a two-year bull market has done little to bolster their financial position, according to Tobias Levkovich, Citigroup's chief U.S. equity strategist.

Asset allocation of defined-benefit pension plans in the U.S.



Source: Federal Reserve

Choose one answer.

- Market returns for stocks
- Allocation to mutual funds
- Allocation to bonds
- Total returns for bonds

2

As an analyst in the strategy division of a private bank, you have been told by your boss to stress-test some client portfolios.

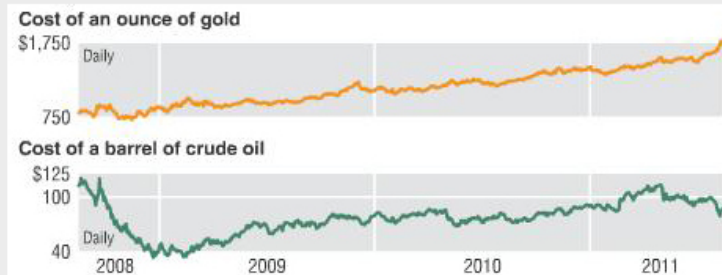
Which of the following tests best represents a stress test that you could create for your boss?

Choose one answer.

- Examine the portfolio's risk-return dynamic by calculating the Sharpe ratio.
- Examine how the portfolio would have performed in the period surrounding the Lehman Brothers bankruptcy.
- Examine how the portfolio has performed over a holding period of at least five years.
- Examine how much risk the portfolio contains, as measured by the standard deviation.

3

Consider the variation of oil prices and gold prices over the last three years, as displayed in the graphs below. Sometimes the price of gold and that of oil move in tandem, and sometimes they move in opposite directions. Which of the following statements is most likely true about the behavior of these commodities' prices during the different stages of a business cycle?



Choose one answer.

- When the prices of oil and gold both fall, market participants expect stagflation.
- When the price of oil falls and the price of gold rises, market participants expect strong economic growth.
- When the prices of oil and gold both rise, market participants expect economic growth without much inflation.
- When the price of oil rises and the price of gold falls, market participants expect increased economic growth without much inflation.

## S

Read the article below and answer the questions that follow.

*Unemployment in U.K. Increases to Highest Level in 15 Years With 8.1% Rate*

October 12, 2011 (Bloomberg) — The UK unemployment rate rose to the highest in 15 years in the three months through August, adding pressure on the government to avoid recession.

The jobless rate increased to 8.1 percent from 7.9 percent in the three months through July, the Office for National Statistics said in London today. The number of unemployed reached 2.57 million, the most since 1994.

Chancellor of the Exchequer George Osborne has pledged to maintain the biggest fiscal squeeze since World War II even as the outlook for the recovery deteriorates. Bank of England policy makers restarted their asset-buying program last week.

The number of people in employment fell 178,000 in the three months through August, the most since the quarter through July 2009, the statistics said.

In the three months through August, youth unemployment increased to 991,000, the highest since records began in 1992. The jobless rate in that category was 21.3 percent.

“It is clear that we are seeing the effect of the international economic crisis on the U.K. labor market,” Employment minister Chris Grayling told Sky News. “We’ve seen big drops in growth in France and Germany.”

Liam Byrne, pensions spokesman for the opposition Labour Party, called the data “a day of judgment” for the government. “Today’s figures are the clearest proof yet that the government’s decision to cut too far and too fast is hurting and just not working,” he said.

Ed Balls, the opposition Labour Party’s Treasury spokesman, will urge the government in a Parliamentary debate today to slow the pace of deficit reduction and boost growth by reinstating a tax on bank bonuses to fund homebuilding, bringing forward infrastructure spending, and offering a tax break for small firms taking on new staff.

1

Based on information in the article, what is most likely to happen if current trends remain the same?

Choose one answer.

- The UK will enter a recession.
- The government of the UK will intensify its deficit reduction.
- The rate of wage growth will outpace the rate of inflation.
- Unemployment rates will taper off.

2

Which of the following is not mentioned in the article as a possible solution to the UK's unemployment problem?

Choose one answer.

- Increased spending on public works
- Increased building of homes
- Reducing consumer price growth
- Tax incentives

3

What can the reader most clearly infer from the article?

Choose one answer.

- Nearly a third of unemployed people in the UK are youths.
- The number of jobless claims was higher than forecast.
- Jobless claims have risen 5 percent since January 2011.
- The total rate of unemployment is the highest it's been since 1992.

1

Suppose a rectangular solid with a square base has a volume of 2 cubic meters. What is the length of one side  $x$  of the base of the solid as a function of the height  $h$  of the box?

A.  $x = \frac{2}{h}$

B.  $x = \sqrt{\frac{2}{h}}$

C.  $x = \frac{h}{2}$

D.  $x = \sqrt{\frac{h}{2}}$

Choose one answer.

- Choice A
- Choice B
- Choice C
- Choice D

2

An investor currently has a 40,000 ¥ portfolio, 40% of which is invested in bonds. The investor wishes to add funds to the portfolio by purchasing bonds so that 52% of the entire portfolio will be invested in bonds.


What value of bonds should the investor purchase?

Choose one answer.

- 4,800 ¥
- 8,320 ¥
- 20,800 ¥
- 10,000 ¥

# 9) Analytical Reasoning

S

 Read the conditions below and answer the questions that follow.

Towns A, B, C, D, E, F, G and O are in an isolated region of the country *Blue* where there are only four roads: Route 1, Route 2, Route 3, and Route 4. These routes are based on the following conditions:

- Route 1 goes from O to B through A.
- Route 2 goes from O to D through C.
- Route 3 goes from A to F through E.
- Route 4 goes from C to G through E.

1

If Route 2 is washed out between O and C, how can one still reach C from O by road?

Choose one answer.

- \_\_\_\_\_
- O to A to E to C
  - O to B to D to C
  - O to A to D to C
  - O to B to E to C

2

Which of the following two roads need to be built to allow a trip through all the towns which starts and ends at the same town and enters each town only once?

Choose one answer.

- \_\_\_\_\_
- One from B to G and another from D to E
  - One from A to C and another from F to G
  - One from B to F and another from D to E
  - One from B to G and another from D to F



3


If a florist has one delivery to make at each of the towns starting with O, and the amount of backtracking is kept to a minimum, what is the fourth town to which the florist makes a delivery?

Choose one answer.

- D
- B
- E
- G

# 10) Situational & Ethical Judgment

S

 You and your fellow analysts have been working very long hours recently and staying in the office beyond midnight is becoming common. One evening when there are few people left in the office, you notice that a new colleague seems very stressed – rubbing his head and muttering to himself. Earlier, he had a phone call with his manager and seemed on the verge of tears. You do not know him well, only by name, but you do know his manager.

1

Pick your most likely course of action:

Choose one answer.

- The next day, ask another analyst who knows him better if they know how he is at the moment and ask them to look out for him. [Partial credit](#)
- Contact the manager the next day to let him know what you saw and let him decide the most appropriate way to deal with the situation.
- Approach him, apologize for interrupting, and ask how he is and whether there is anything you can do to help.
- Decide that as it is the first time you have seen this happen, you will wait until the next time you see this before responding. [Partial credit](#)

2

Pick your least likely course of action:

Choose one answer.

- The next day, ask another analyst who knows him better if they know how he is at the moment and ask them to look out for him. [Partial credit](#)
- Contact the manager the next day to let him know what you saw and let him decide the most appropriate way to deal with the situation.
- Approach him, apologize for interrupting, and ask how he is and whether there is anything you can do to help.
- Decide that as it is the first time you have seen this happen, you will wait until the next time you see this before responding. [Partial credit](#)