

Question #1 of 28

Tom Grenkin is a market timer with an information ratio of 0.75. He makes a prediction of the movement in the market each quarter. Jane Fortina is a stock selector who follows 50 companies and revises her assessment each quarter. She also has an information ratio of 0.75. Assuming both managers have unconstrained portfolios, which of the following statements regarding the two managers is *most accurate*?

- A) As Grenkin makes fewer bets per year, he requires a higher information coefficient on each bet than Fortina to achieve the same information ratio.
- B) As Fortina's strategy has a much larger breadth, she must have a larger information coefficient than Grenkin.
- C) As both managers have the same information ratio, they must also have the same information coefficient.

Question #2 of 28

Helen Wilde is trying to estimate the active return of Optimal fund. A comparison of Optimal's holdings and that of the benchmark are shown below:

| Asset Class (i) | Optimal Weight (w_{Pi}) | Benchmark Weight (w_{Bi}) | Optimal Return $E(R_{Pi})$ | Benchmark Return $E(R_{Bi})$ |
|-----------------|-----------------------------|-------------------------------|----------------------------|------------------------------|
| Industrials | 30% | 40% | 11% | 12% |
| Financials | 50% | 30% | 6% | 5% |
| Utilities | 20% | 30% | 14% | 12% |

The expected active return due to asset allocation for Optimal is *closest* to:

- A) - 0.86%
- B) - 1.40%
- C) -0.44%

Question #3 of 28

An active manager makes quarterly bets on the stocks in the Russell 2000 index and uses the index as the benchmark. The manager claims a modest IC of 0.02 using a stock screening model. Sam Fox, CFA makes the following two statements:

- I. The bets on the 2000 stocks in the index is not independent as the screens by definition introduce dependency in the decision process.
- II. The quarterly bets are likely to be independent.

How many of Fox's statements are correct:

- A) Neither statement is correct.
 - B) Both statements are correct.
 - C) Only one statement is correct.
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Question #4 of 28

Zeta fund has active return and active risk of 1.6% and 8% respectively. Benchmark portfolio has a Sharpe ratio of 0.35 and standard deviation of benchmark returns is 10.5%.

What is the level of active risk that an investor would need to take to maximize the Sharpe ratio of a portfolio consisting of Zeta fund and the benchmark portfolio?

- A) 8%
 - B) 6%
 - C) 7%
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Question #5 of 28

Which of the following statements regarding the information ratio of an unconstrained portfolio is *most likely* correct?

- A) A market timer who uses independent information to make predictions about market movements on a monthly basis and has an information ratio of 0.20 must have an

- B)** A market timer who uses independent information to make predictions about market movements on a monthly basis and has an information ratio of 0.20 must have an
- C)** A market timer who uses independent information to make predictions about market movements on a monthly basis and has an information ratio of 0.20 must have an

Question #6 of 28

An active manager currently covers 40 stocks and makes a forecast for each of them every quarter. Next year he intends to cover the same stocks but only once every 6 months. Assuming the manager's skill, measured in terms of the correlation of each forecast with actual returns doesn't change, which of the following statements is *most* accurate?

- A)** The information ratio will fall by approximately 50%
- B)** The information ratio will fall by approximately 30%
- C)** The information coefficient will fall by approximately 50%

Question #7 of 28

Helen Wilde is trying to estimate the active return of Optimal fund. A comparison of Optimal's holdings and that of the benchmark are shown below:

| Asset Class (i) | Optimal Weight (w_{Pi}) | Benchmark Weight (w_{Bi}) | Optimal Return $E(R_{Pi})$ | Benchmark Return $E(R_{Bi})$ |
|-----------------|-----------------------------|-------------------------------|----------------------------|------------------------------|
| Industrials | 30% | 40% | 11% | 12% |
| Financials | 50% | 30% | 6% | 5% |
| Utilities | 20% | 30% | 14% | 12% |

The expected active return for Optimal is *closest* to:

- A)** -0.44%
- B)** - 0.80%
- C)** - 1.40%

Question #8 of 28

An active manager has an information coefficient of 0.07, transfer coefficient of 0.90, and makes 49 independent bets per year. Benchmark portfolio has a Sharpe ratio of 0.40 and standard deviation of benchmark returns is 12%. The optimal amount of active risk is *closest* to:

- A) 6%
 - B) 8%
 - C) 12%
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Question #9 of 28

Alisa Darent is evaluating several active portfolio managers with the same style and benchmark portfolio.

| Manager | Active return | Active risk |
|---------|---------------|-------------|
| Alfred | 3.00% | 12.00% |
| Brad | 2.20% | 11.00% |
| Charles | 2.00% | 10.50% |

Benchmark return is expected to be 11%. What will be the maximum expected return for Darent's portfolio assuming that she wants to limit her active risk to 11%?

- A) 13.75%
 - B) 2.75%
 - C) 2.20%
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Question #10 of 28

Pamela Grieve claims that her information coefficient is 0.20 on monthly bets on 10 stocks in the healthcare industry. Assuming unconstrained optimization, the reduction in her information ratio if her bets have a correlation coefficient of 0.45 as opposed to being truly independent is *closest* to:

- A) 86%
- B) 22%
- C) 45%

Question #11 of 28

Which of the following statements is *least accurate*?

- A) The Sharpe ratio of a portfolio is unaffected by addition of cash or leverage in the portfolio.
- B) A closet index fund has a low Sharpe ratio.
- C) Investors can take active risk that is suitable for them by investing in a combination of actively managed portfolio and benchmark portfolio.

Question #12 of 28

Charles Griffith makes quarterly bets between stocks of industrial and utility sectors. The historical correlation between the returns of the two sectors is -0.20. Further information is as below:

| Sector | E (R) | σ | Benchmark |
|------------|--------|----------|-----------|
| | | | Weight |
| Industrial | 12.00% | 13.0% | 80% |
| Utility | 5.2% | 2.5% | 20% |

The annualized active risk of Griffith's strategy is *closest* to:

- A) 27.44%

B) 13.72%

C) 10.90%

Question #13 of 28

Susan Thomas is evaluating the holdings of Primus fund. Based on the information below, the estimated active return is *closest* to:

| Security (i) | PortfolioWeight (w_{Pi}) | BenchmarkWeight (w_{Bi}) | Return $E(R_i)$ |
|--------------|------------------------------|------------------------------|-----------------|
| X | 30% | 40% | 11.20% |
| y | 15% | 25% | 4.25% |
| z | 55% | 35% | 14.00% |
| Total | 100% | 100% | |

A) 1.26%

B) 0.44%

C) 1.77%

Question #14 of 28

Zeta fund has active return and active risk of 1.6% and 8% respectively. Benchmark portfolio has a Sharpe ratio of 0.35 and standard deviation of benchmark returns is 10.5%.

The maximum possible Sharpe ratio of a portfolio consisting of Zeta fund and the benchmark portfolio is *closest* to:

A) 0.4

B) 0.55

C) 0.5

Question #15 of 28

Zeta fund has active return and active risk of 1.6% and 8% respectively. Benchmark portfolio has a Sharpe ratio of 0.35 and standard deviation of benchmark returns is 10.5%.

What is the weight of benchmark portfolio in a portfolio consisting of Zeta fund and the benchmark portfolio assuming that the portfolio is constructed to have optimal active risk?

- A) 0.1667
- B) 0.2
- C) 0.25

Question #16 of 28

Which of the following is correct for a constrained active portfolio?

- A) $TC=1$
- B) $TC<1$
- C) $TC>1$

Question #17 of 28

Charles Griffith makes quarterly bets between stocks of industrial and utility sectors. The historical correlation between the returns of the two sectors is -0.20 and Griffith's bets have been correct 55% of the time. Further information is as below:

| Benchmark | | | |
|------------|--------|----------|--------|
| Sector | E (R) | σ | Weight |
| Industrial | 12.00% | 13.0% | 80% |
| Utility | 5.2% | 2.5% | 20% |

The expected annualized active return of Griffith's sector rotation strategy is *closest* to:

- A) 5.48%
- B) 13.72%

C) 10.64%

Question #18 of 28

An active manager has an information coefficient of 0.08, transfer coefficient of 0.50, and makes 100 independent bets per year. What is the expected active return for an active risk constraint of 5%?

A) 2.4%

B) 1.8%

C) 2.0%

Question #19 of 28

Charles Griffith makes quarterly bets between stocks of industrial and utility sectors. Griffith's strategy has an annualized active risk of 18%. Based on the information below, If Griffith wants to limit his active risk to 6%, what is the allocation to Utility sector when Griffith is bullish about Industrial stocks?

| Benchmark | |
|------------|--------|
| Sector | Weight |
| Industrial | 80% |
| Utility | 20% |

A) 14%

B) -13%

C) 5%

Question #20 of 28

Jon Gamlin is comparing a market timing strategy with a stock selection strategy. He draws the following two conclusions for unconstrained active managers:

Conclusion 1

To achieve the same information ratio, a market timer making weekly forecasts on the movement of the market needs to have a higher skill level than a stock selector following 25 stocks and updating the forecast semi-annually

Conclusion 2

A specialist following only 4 stocks who revises his forecast 100 times per year will achieve the same information ratio as a stock selector with the same skill level who follows 50 stocks and updates his assessments semi-annually

Regarding Gamlin's conclusions:

- A) Only conclusion 2 is correct.
 - B) Neither conclusion is correct.
 - C) Only conclusion 1 is correct.
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Question #21 of 28

Which of the following terms is the number of independent bets per year made by an active manager?

- A) Breadth
 - B) Information Coefficient
 - C) Transfer Coefficient
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Question #22 of 28

Which of the following statements is *least accurate*?

- A) Unlike Sharpe ratio, information ratio is affected due to addition of cash or leverage.

- B)** The information ratio of a constrained active portfolio is unaffected by aggressiveness of the active weights.
- C)** Sharpe ratio of a portfolio consisting of a combination of benchmark and actively managed portfolio with positive active return will be higher than the Sharpe ratio of the
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Question #23 of 28

Which of the following is correct for an unconstrained active portfolio?

- A)** $TC=1$
- B)** $TC<1$
- C)** $TC>1$
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Question #24 of 28

An active manager has an information coefficient of 0.05 and makes 36 independent bets per year. What is the manager's information ratio given a transfer coefficient of 0.75?

- A)** 1.35
- B)** 0.45
- C)** 0.23
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Question #25 of 28

Which of the following terms is the cross-sectional correlation between forecasted active returns and actual active weights adjusted for risk?

- A)** Information Coefficient
- B)** Breadth
- C)** Transfer Coefficient
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Question #26 of 28

An active manager expects his information coefficient to drop from 0.08 to 0.02 in the coming period due to extremely volatile and unpredictable markets. As a response he intends to increase his breadth by a factor of 4. Which of the following statements is *most accurately* describes the impact on the information ratio?

- A) The information ratio will remain constant
 - B) The information ratio will decrease
 - C) The information ratio will increase
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Question #27 of 28

When choosing an active manager, an investor with a high level of risk aversion:

- A) will choose the manager with the highest active return.
 - B) will choose the manager with the highest information ratio.
 - C) will choose a manager with the lowest active risk.
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Question #28 of 28

Which of the following terms is the ex-ante risk weighted correlation between forecasted active returns and actual active returns?

- A) Information Coefficient
- B) Transfer Coefficient
- C) Breadth