



- 1. Shorting is a way of making money when the price of assets...
  - a. Increase
  - b. Decrease
- 2. Shorting involves...
  - a. Selling an asset you do not own and then buying it back when the price is lower.
  - b. Buying an asset and then selling it when the price is greater than the purchase price.

## Solution:

This is achieved by borrowing an asset (e.g., from a broker) and then selling it to another party. Profit can be made if the price decreases since you'd buy back the stock at a lower price and return the asset to the lender (i.e., the broker) and the profit would be the difference between the price you sold it for and the price you bought it for.

- SuperStore Inc.'s current stock price of \$105.36 is forecasted to either increase to \$118.49 or decrease to \$98.93 in approximately 6 months' time. Assuming the data is reliable...
  - Shorting the stock is unquestionably the most optimal investment strategy.
  - b. Shorting the stock is unquestionably the least optimal investment strategy.
  - c. Shorting the stock is less optimal relative to going long in the stock.
  - d. Shorting the stock is more optimal relative to going long in the stock.



## Solution (Question 3):

The expected increase in price (\$118.49 - \$105.36 = \$13.13 (or \$118.49 / \$105.36 - 1 = 12.46%)) is greater than the expected decrease in price (\$98.93 - \$105.36 = -\$6.43 (or \$98.93 / \$105.36 - 1 = -6.10%), meaning shorting the stock would be suboptimal.

- 4. Calculate the profit of a short that involved borrowing and selling 100 shares of BitDesk Plc for \$56.93 and buying them back for \$52.83. Assume the trade took place over 1 month, and the monthly borrowing interest rate is 0.5%, and monthly savings rate is 0.2%. Round off your final answer to 2 decimal places.
  - a. \$410
  - b. \$381.54
  - c. \$392.92
  - d. \$394.15
  - e. \$373.59

## Solution:

Borrow 100 shares at \$56.93 each (or \$56.93 x 100 = \$5,693 value).

Sell 100 shares for \$56.93 each = \$5,693.

Invest \$5,693 in a risk-free security earning 0.2% per month.

Buy back 100 shares for \$52.83 each = \$5,283

Profit on trade = (Sale Price – Purchase Price) –

(Interest payable % – Interest receivable %) x

Amount borrowed or saved.

Profit on trade =  $(\$5,693 - \$5,283) - (0.005 - 0.002) \times \$5,693$ 

Profit on trade = \$392.92



- 5. What is the profit or loss of a short that involved borrowing and selling 1,000 shares of LotDesk Plc for £9.47 and buying them back for £17.39 owing to the broker requiring the position to be closed. Assume each trade incurs a cost of £20. For simplicity, assume there is no interest payable nor receivable. Round off your final answer to 2 decimal places.
  - a. £7,920
  - b. £7,960
  - c. £7,920
  - d. £7,960

## Solution:

Borrow 1,000 shares at £9.47 each (or £9.47 x 1,000 = £9,470 value).

Sell 1,000 shares for £9.47 each = £9,470

Incur transaction cost of £20.

Buy back 1,000 shares at £17.39 each = £17,390

Incur transaction cost of £20.

Loss on trade = (Sale Price – Purchase Price) – Transaction costs

Loss on trade = (£9,470 - £17,390) - (£20 + £20)

Loss on trade = -£7,960