## FOUNDATION

## Short Selling



## Why SMG Teams Short

When the market is declining (bear market) the opportunity to sell before buying gives SMG Teams a chance to realize gains. However, they need to know that a "sell-high, buy-low" strategy is really risky. The losses can be unlimited.

When a team Short Sells they borrow stock and then sell it with the intention of buying it back at a lower price. If the stock's price has dropped, the team makes a profit because they are able to buy it back for less than the price they sold it for. If the stock's price increases, however, the team loses money because they will pay more than what you sold it for. Buying back the stock that has been shorted is called a Short Cover.

If you short sell, you should know that if the price of the stock rises, your losses can be limitless because the stock's price can rise indefinitely. A margin call will be made if the maintenance requirement is not met. A maintenance requirement is a rule that a stockholder's equity must not fall below a certain percentage. The Stock Market Game's maintenance requirement is $30 \%$ of the current value of your current holdings.

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## Hypothetically Speaking

Team SIA_1_A234 has a current Total Equity of $\$ 82,000$. All of its members have agreed to short sell as a way of quickly increasing their equity. Company AA's stock price has dropped dramatically over the past month, from $\$ 80$ a share to $\$ 60$ a share. Team SIA_1_A234 has decided to short sell Company AA.

For the sake of simplicity, the following examples assume the value of the portfolio is static, meaning it does not take into account any interest earned in its cash balance or gains and losses from the portfolio's other holdings.

## Short Sell Math

1. Team SIA_1_A234 short sells 200 shares of Company AA at $\$ 60$ a share. The money from the short sale is determined by multiplying the current price per share by the number of shares sold short. Proceeds are not added to your ending balance at this time. $\mathbf{\$ 6 0 \times 2 0 0}=\mathbf{\$ 1 2 , 0 0 0}$
2. A $1 \%$ broker's fee is charged. $\mathbf{\$ 1 2 0 0 0} \mathbf{x} \mathbf{. 0 1}=\mathbf{\$ 1 2 0}$
3. The broker's fee is subtracted from the team's Total Equity. $\mathbf{\$ 8 2 , 0 0 0} \mathbf{- \$ 1 2 0}=\mathbf{\$ 8 1 , 8 8 0}$
4. The trade appears in Account Holdings as -200 shares. The cost of the trade appears in Account Summary under Value of Shorts.

## Short Cover Math

1. The transaction value is the current price times the number of shares purchased.

| If the stock price fell to $\$ 56$ | If the stock price rose to $\$ 64$ |
| :--- | :--- |
| $\$ 56 \times 200=\$ 11,200$ | $\$ 64 \times 200=\$ 12,800$ |

2. A broker's fee of $1 \%$ is charged.

| If the stock price fell to $\$ 56$ | If the stock price rose to $\$ 64$ |
| :--- | :--- |
| $\$ 11,200 \times .01=\$ 112$ | $\$ 12,800 \times .01=\$ 128$ |

3. This is subtracted from the current equity.

| If the stock price fell to $\$ 56$ | If the stock price rose to $\$ 64$ |
| :--- | :--- |
| $\$ 81,880-\$ 112=\$ 81,768$ | $\$ 81,880-\$ 128=\$ 81,752$ |

4. The gain or loss on the covered short position during that week is applied to the balance. (Previous closing price - short cover price) $\times$ number of shares + balance $=$ new ending balance. This transaction eliminates the short position in the team's portfolio.

| If the stock price fell to $\$ 56$ | If the stock price rose to $\$ 64$ |
| :--- | :--- |
| $(\$ 60-\$ 56) \times 200+\$ 81,768=\$ 82,568$ | $(\$ 60-\$ 64) \times 200+\$ 81,768=\$ 80,968$ |

