Margin Call

- In the illustration, what is the price at which margin call will be triggered?
  - Price should drop enough to make equity = 0.25 * Market Value(MV)
  - For a price of $ P, MV = 1000 * P ; Equity = (1000 * P) – 10000

$$\text{Margin} = \frac{1000\,P - 10000}{1000P} = 0.25$$

- P = $ 13.333
- Suppose price drops to $12 per share. Then, MV = $ 12,000; Equity = $ 2000; Margin = 2/12 = 16.6%. Investors gets margin call.
- To prevent winding up of position, margin has to brought upto maintenance margin of 25%.
  - Bring equity upto $3000.
  - Pay $1000 of debt out of pocket.
  - Sell some shares to pay down the debt.

Margin Call – How many shares to sell?

Premise: Both Market Value and Debt decrease by the amount of Stock sold.

Margin Call – How many shares to sell?

Here, equity stays the same at \$2000

\$8000 of MV to bring up margin to 25%

Sell \$ 4000 of shares and pay down debt

Sell 4000/12 = 333.333 shares

Or formally, Say sell N shares @ \$12

MV = 12000 - 12 N ; Debt = 10000 - 12 N

Equity = 2000 (as before)

Margin = 2000/(12000-12N) = 0.25

N = 333.333 shares