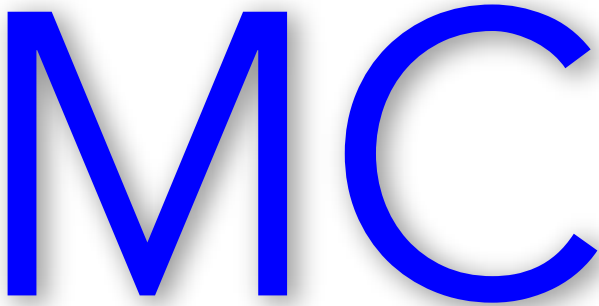
11

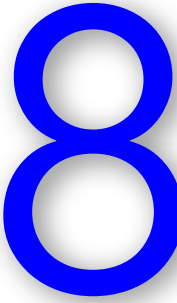
MR


MC

1

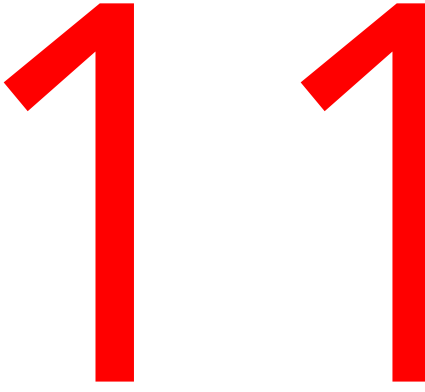
1.5

2



10

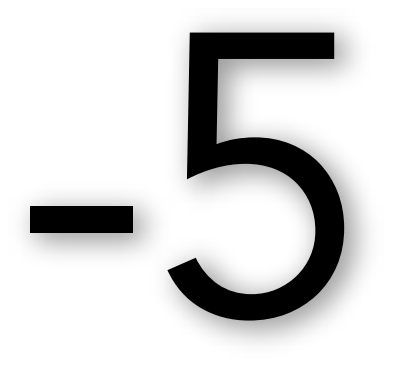
3

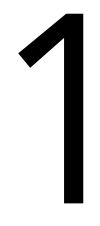


If The firm produces more than 11 units, profit will decrease …

-2

-3


-5

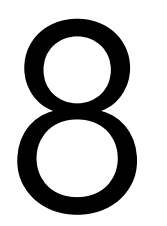


2

3

5

7

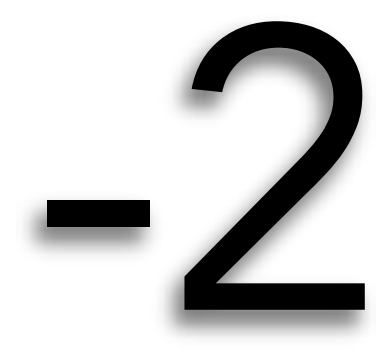


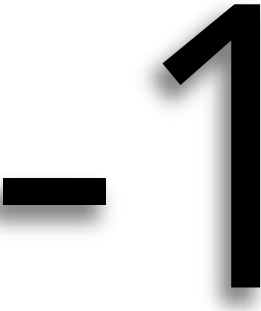
10

12

13

14

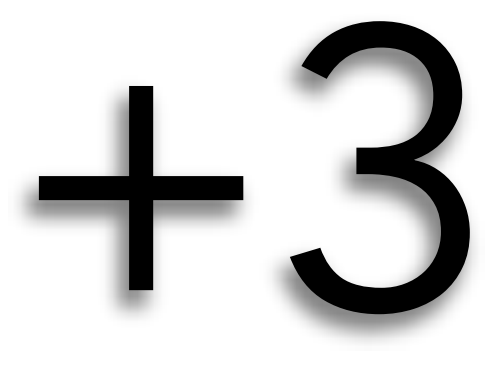

-2

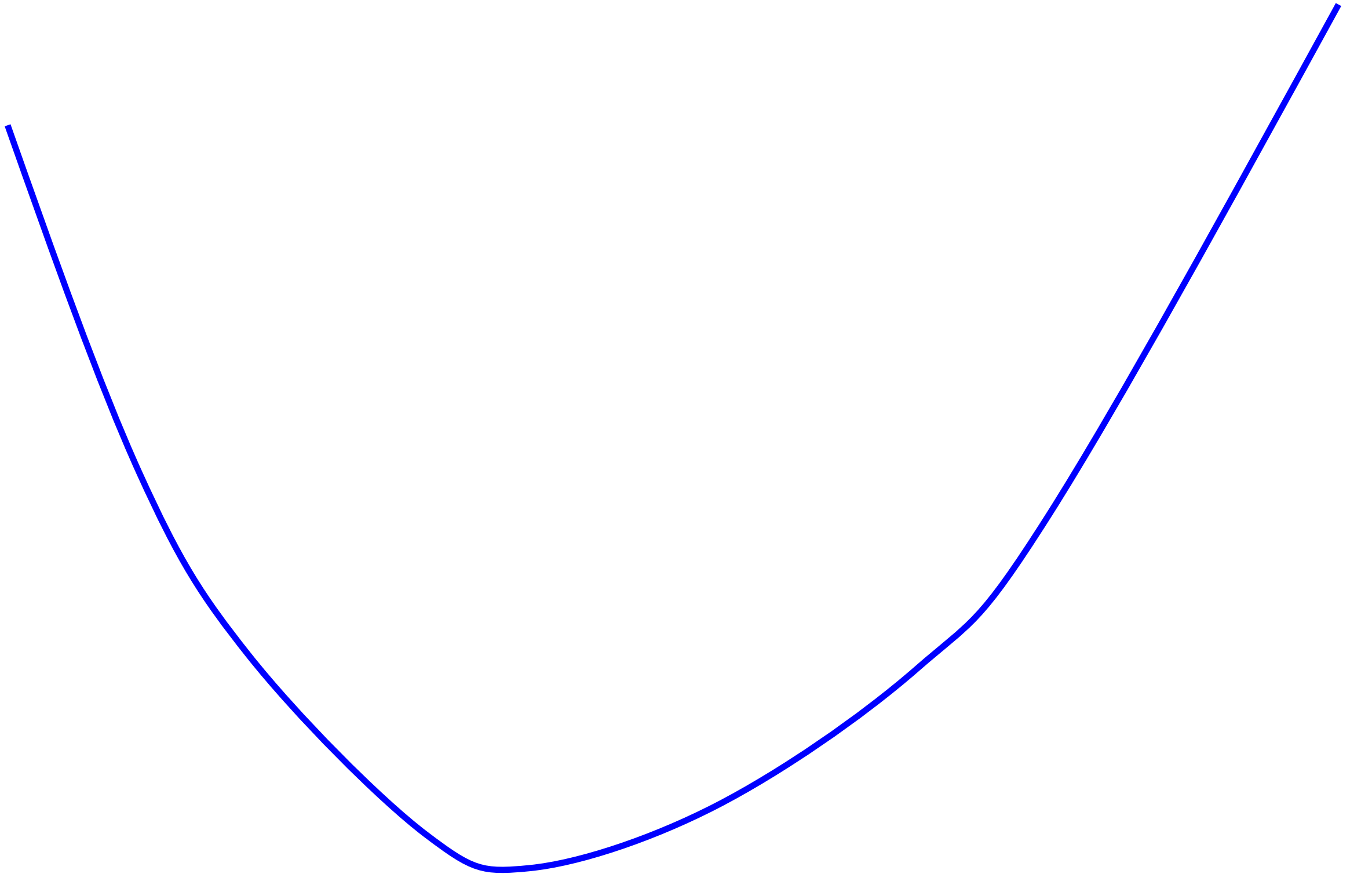


+3

+4

+3.5


+3



Total Loss = - $7

Total Profit = -4-2-1+0+2+3+4+3.5+3+2+0 = 10.5

MC = MR

5

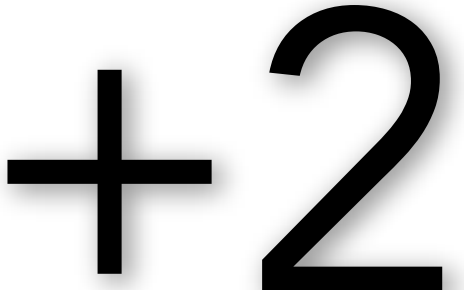
5

Profit/Loss per unit = MR-MC

MC = Cost of last unit produced

P_e= MR= Revenue per unit sold

3


+2

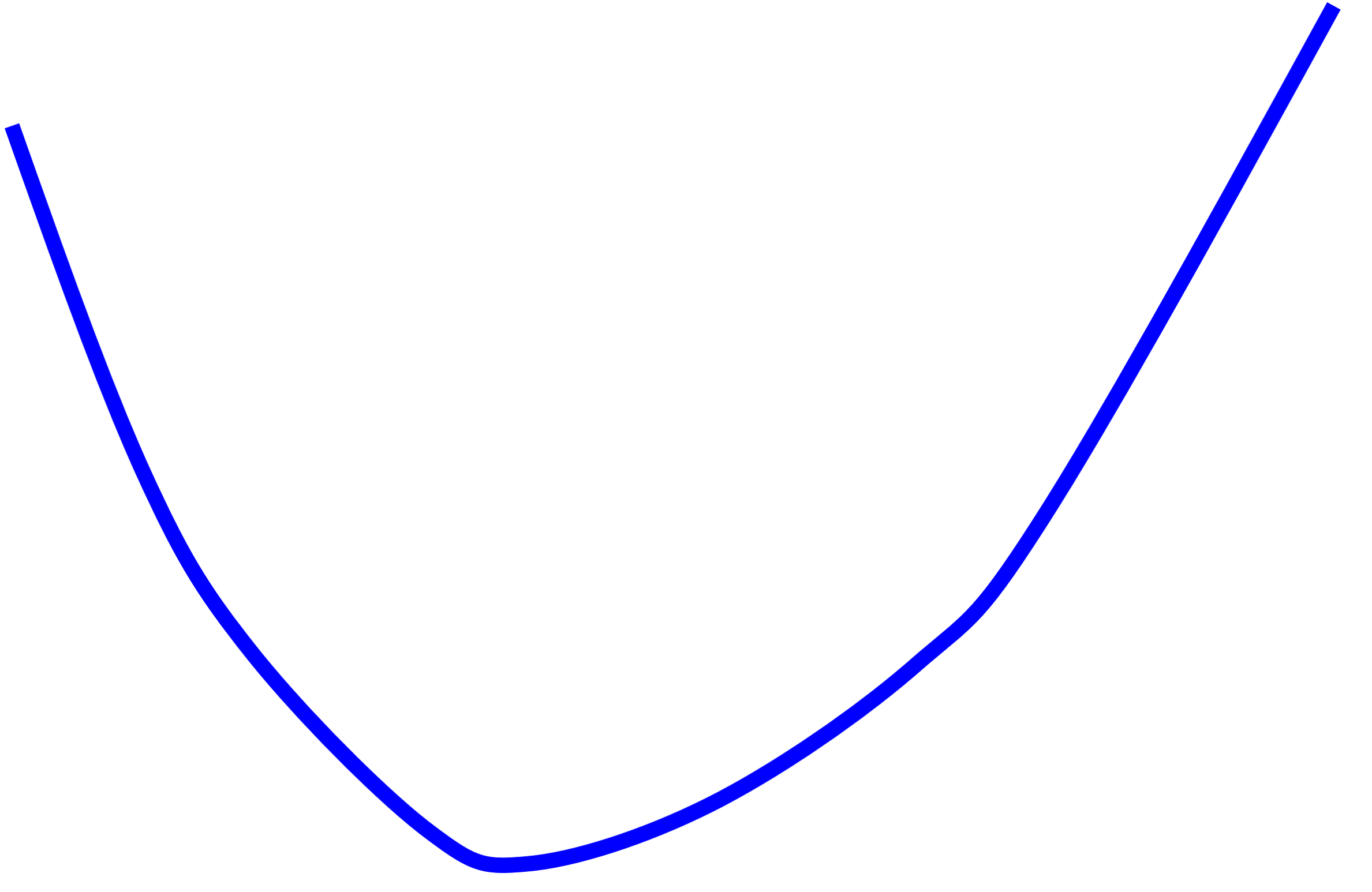
+2

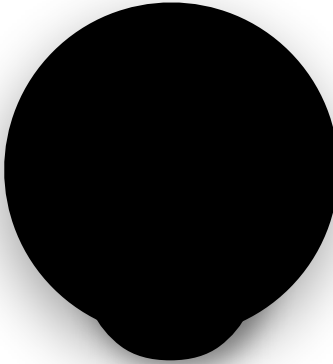
4

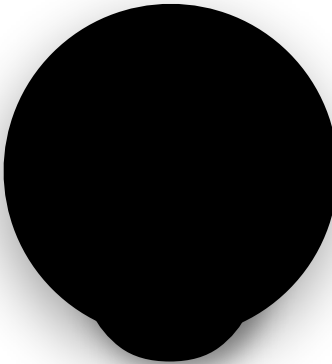
MC of unit 1=9

$$P_e = 5$$

Loss = -4

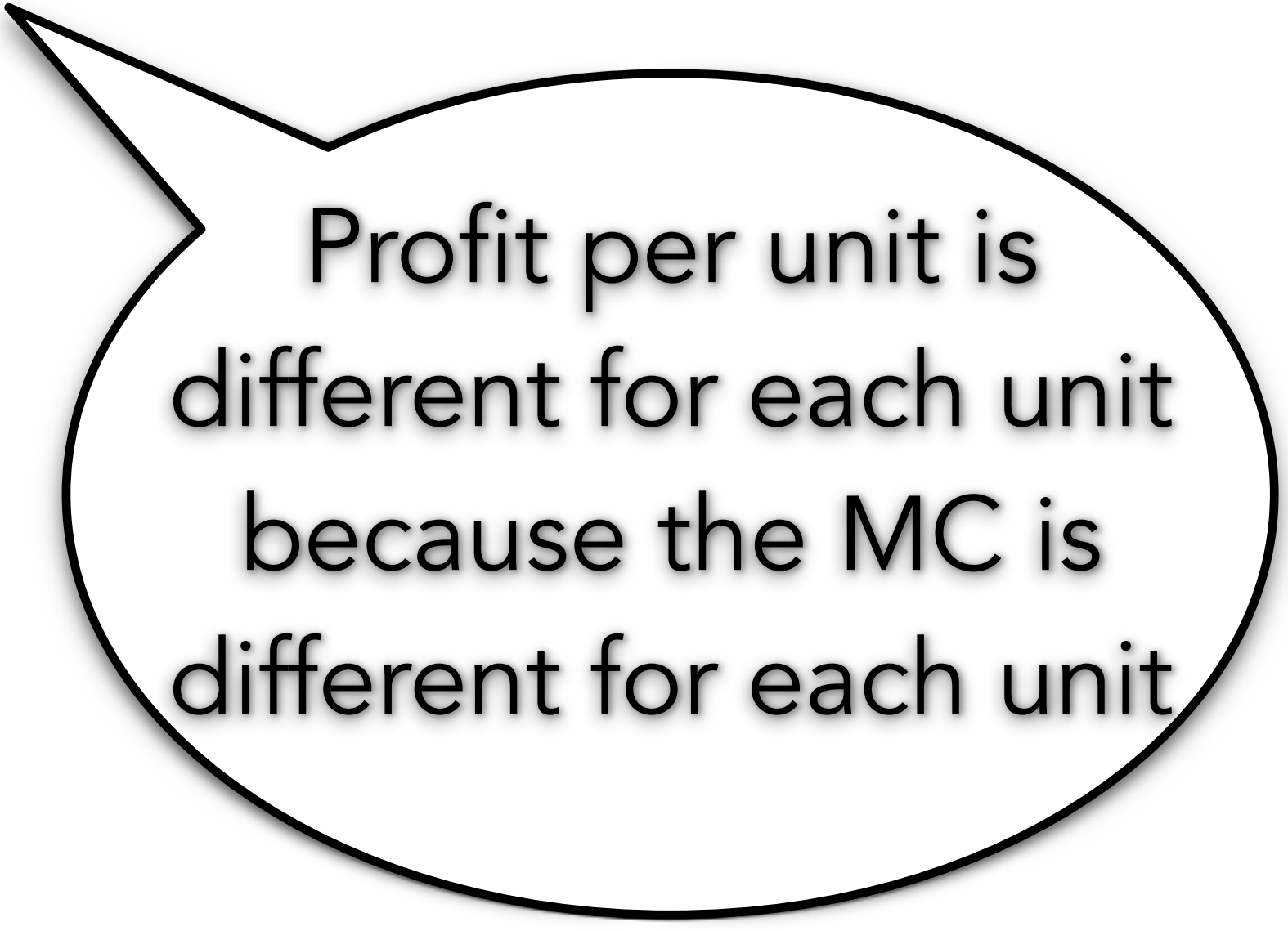


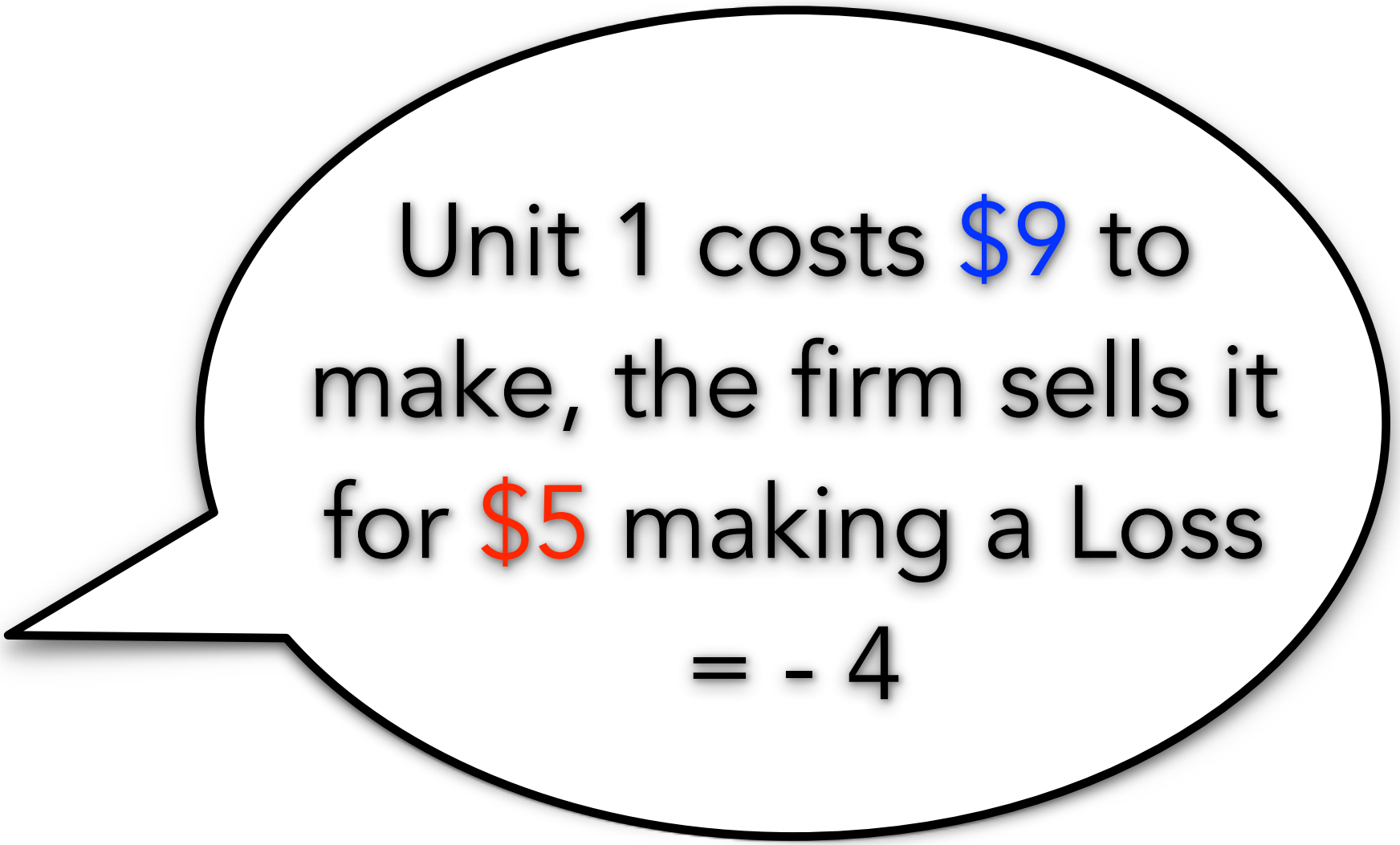


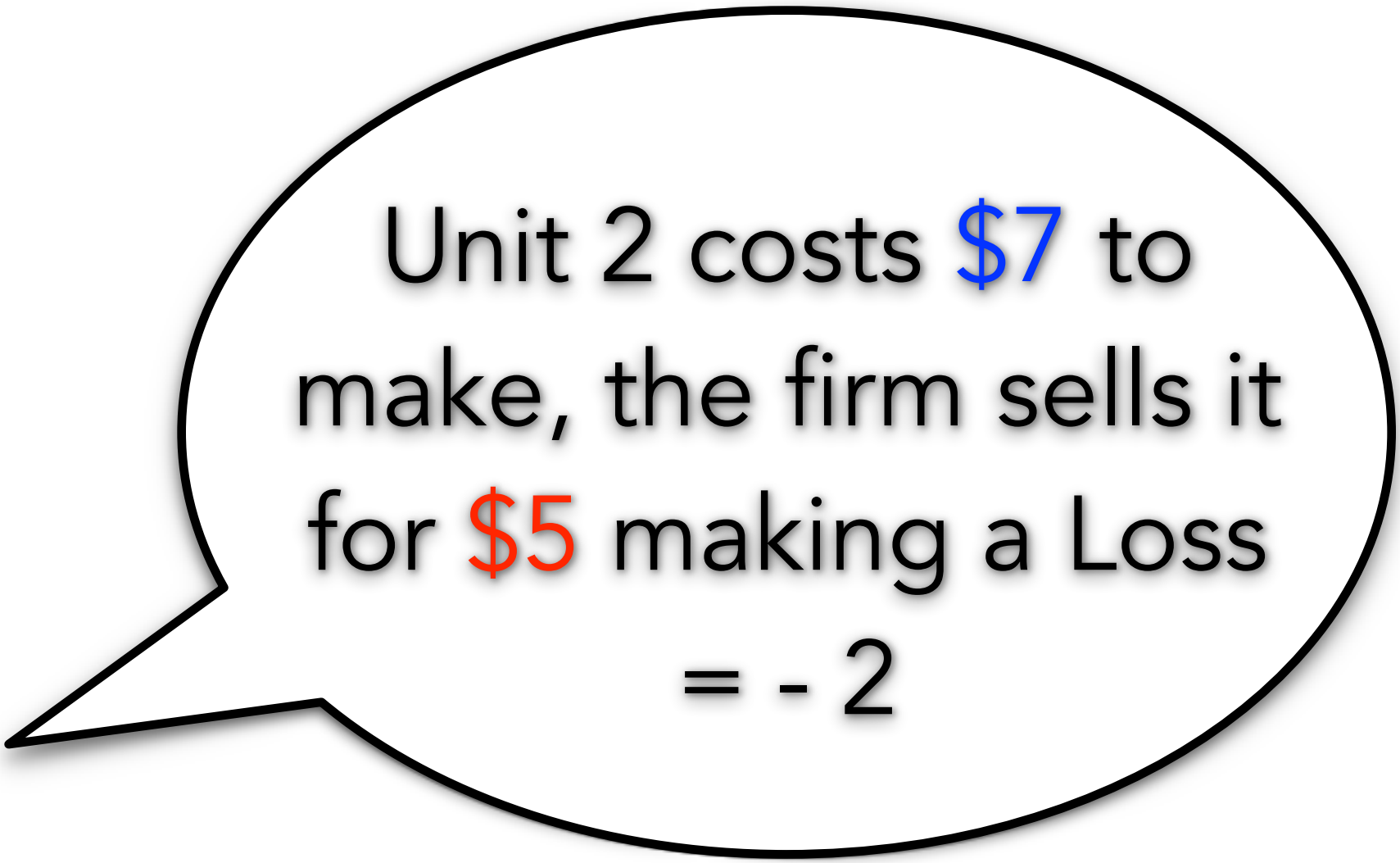


MC: cost of producing the unit

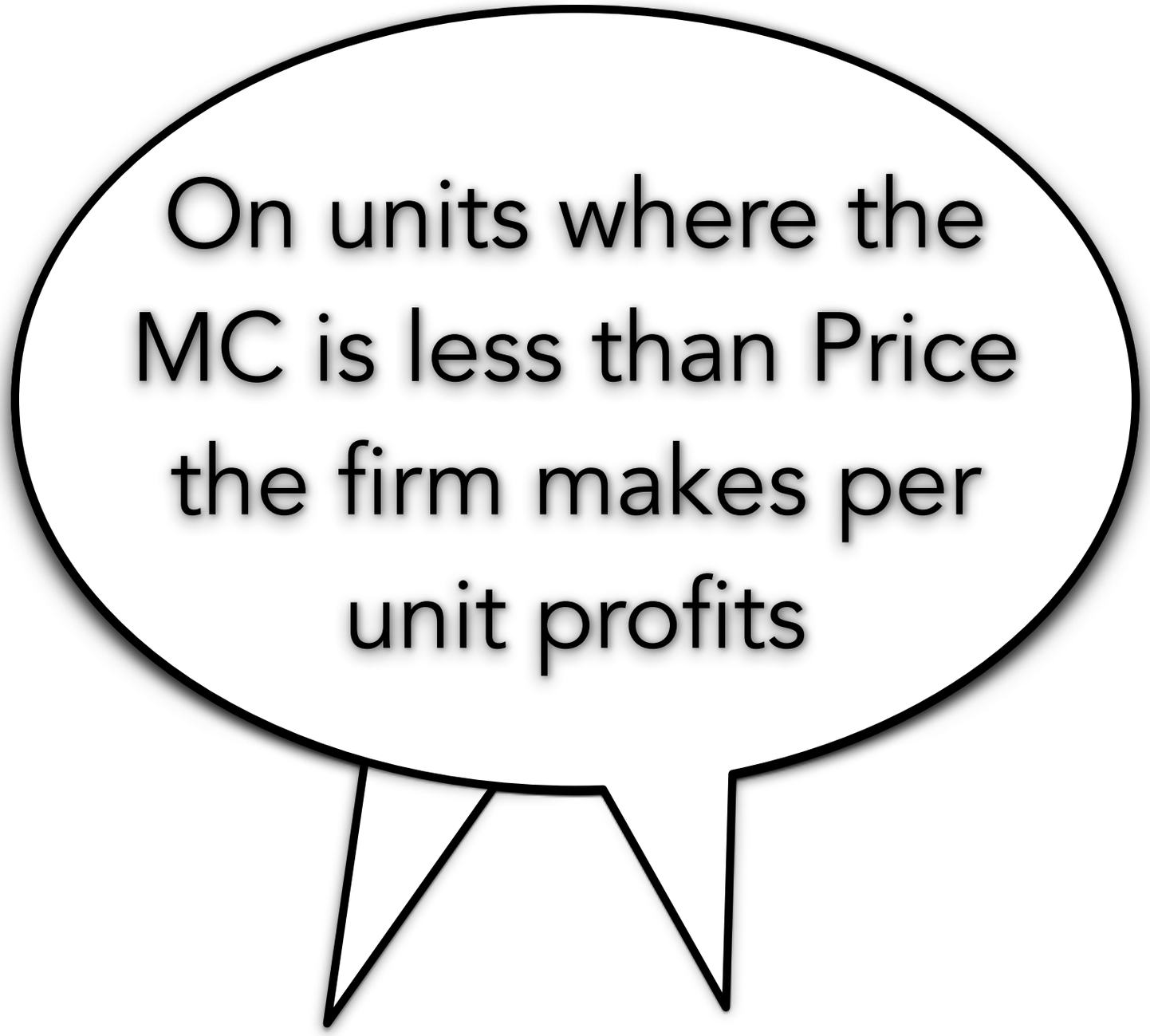
MR: Revenue the firm gets from selling the unit


Profit per unit is different for each unit because the MC is different for each unit


Unit 1 costs $9 to make, the firm sells it for $5 making a Loss = - 4


Unit 2 costs $7 to make, the firm sells it for $5 making a Loss = - 2

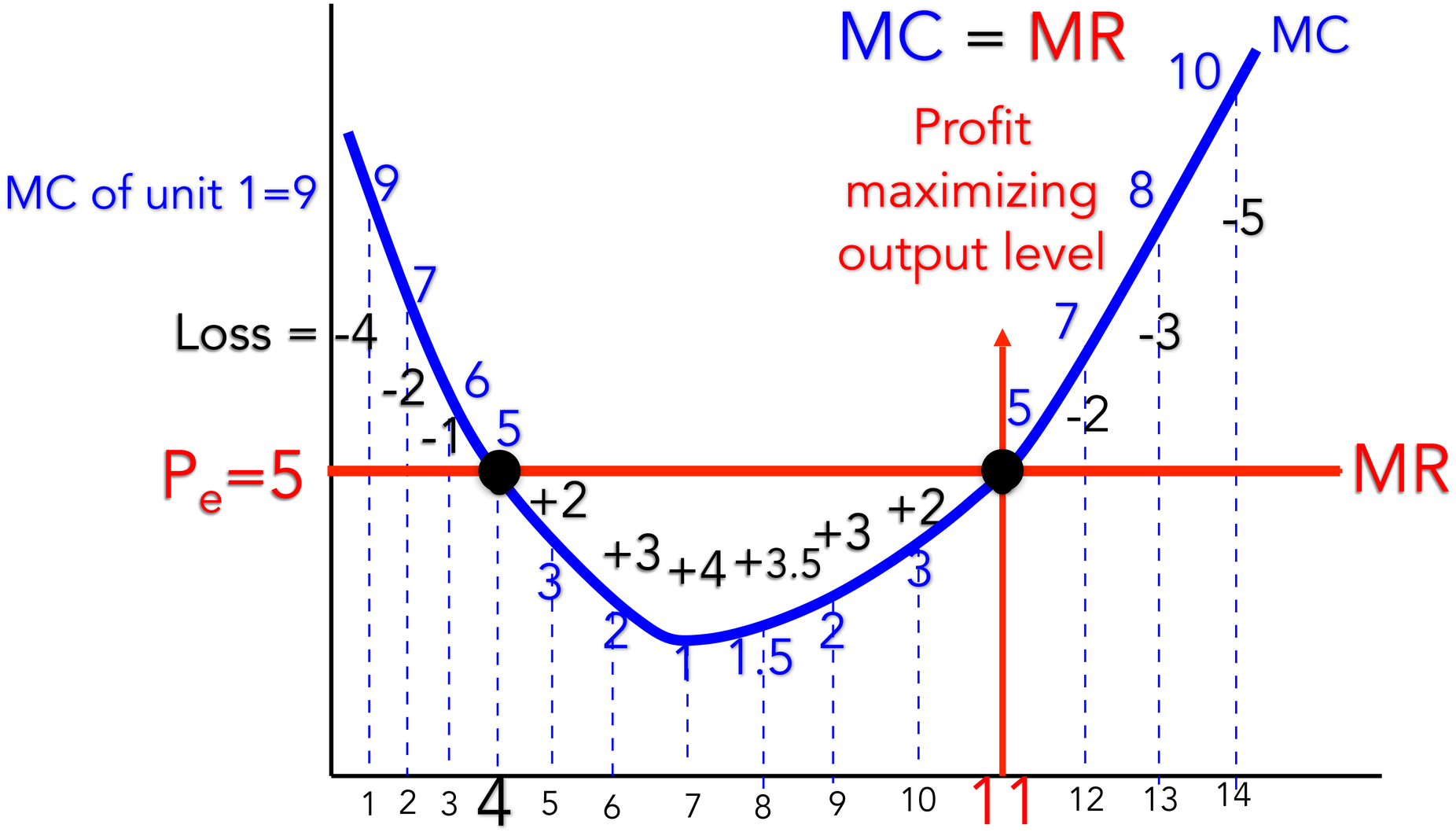
If the firm produces only 4 units, per unit losses: -4,-2,-1,0 will add up to a total of -7

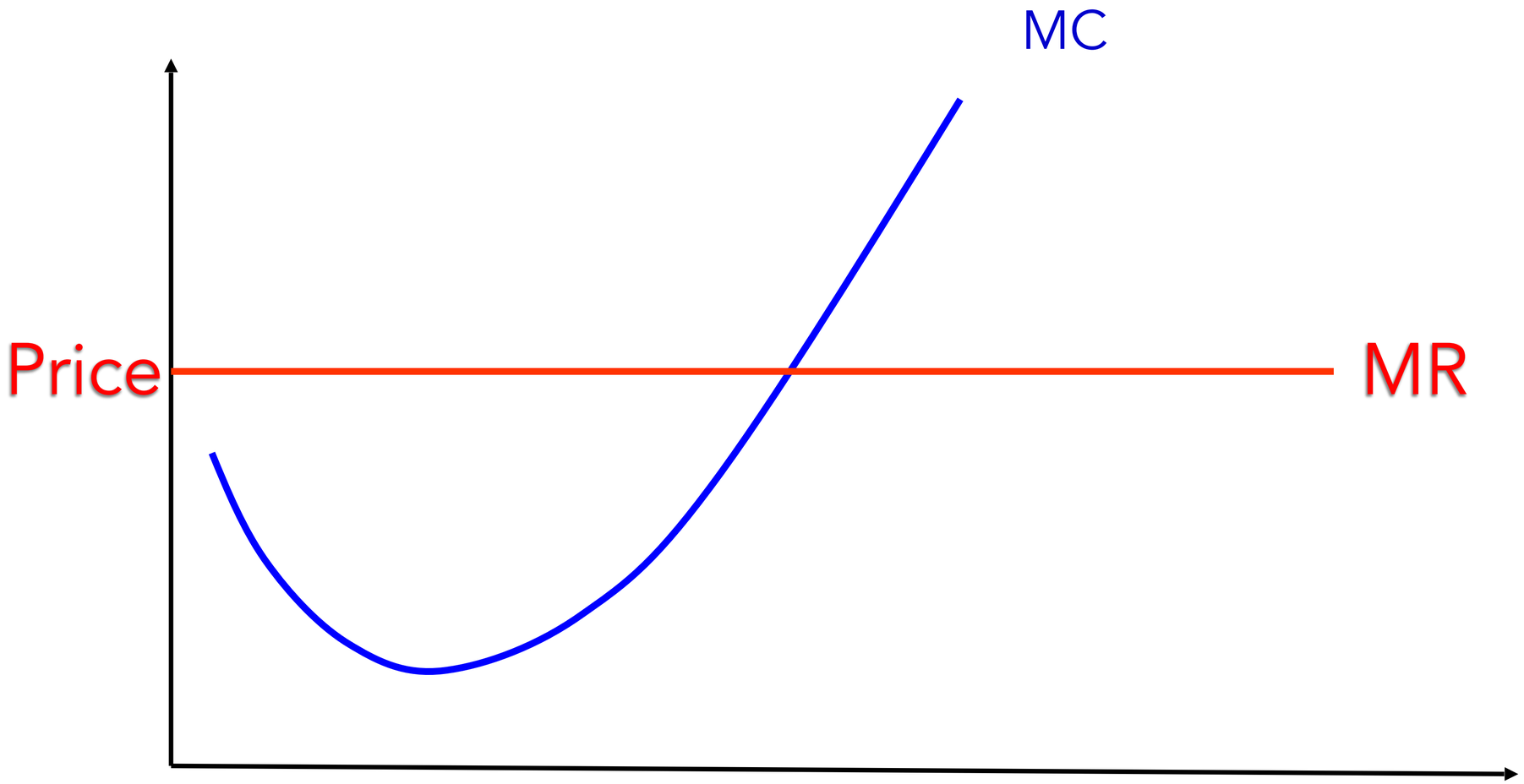

On units where the MC is less than Price the firm makes per unit profits

If the firm produces 11 units, adding all per unit losses and profits= total profit+10.5

Profit maximizing output level

If The firm produces more than 11 units, profit will decrease …



Total Profit = -4-2-1+0+2+3+4+3.5+3+2+0 = 10.5

To Maximize Total Profit, Perfectly Competitive firms choose output where MC = MR