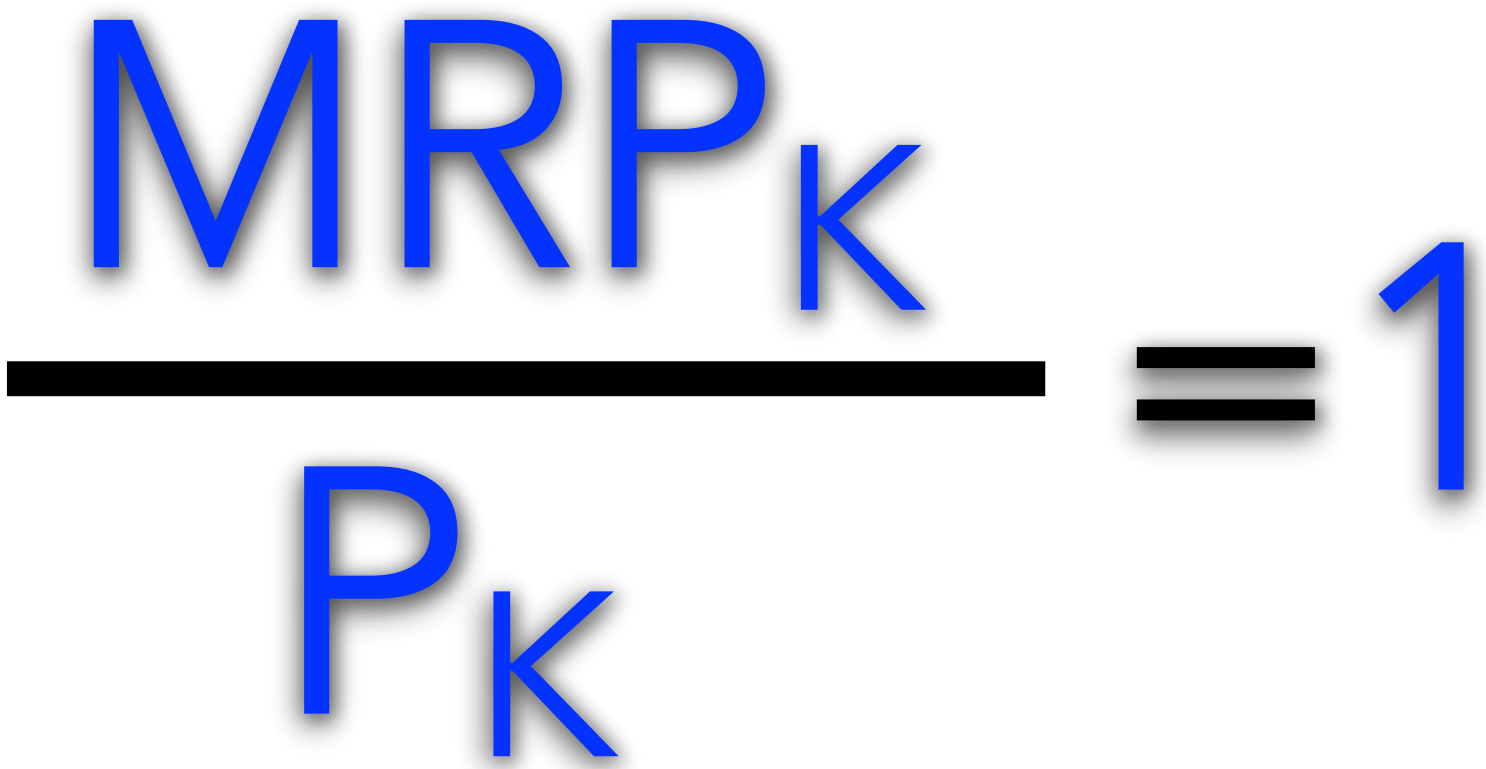
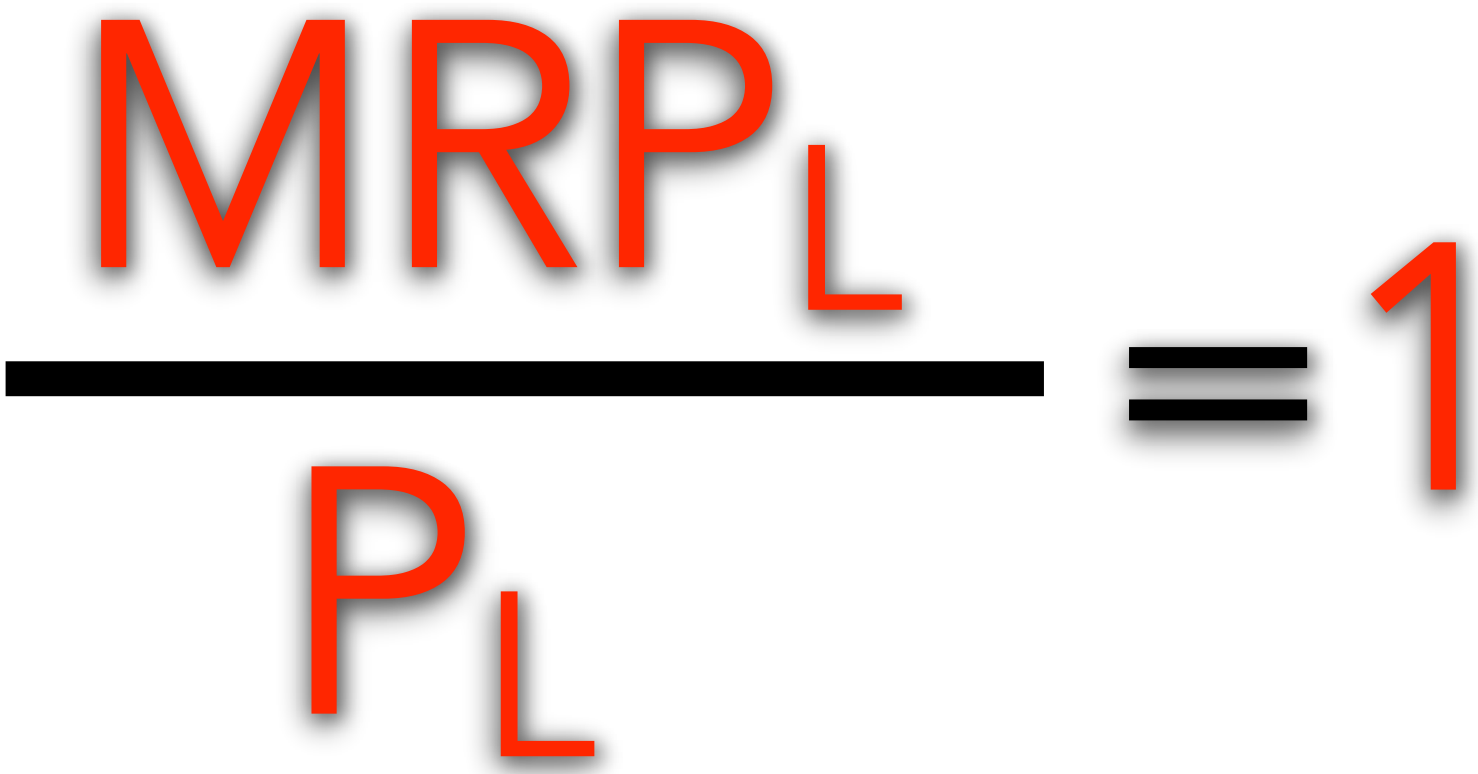
The firm gets $1 in revenue for each dollar spent on labor

The firm gets $1 in revenue for each dollar spent on capital

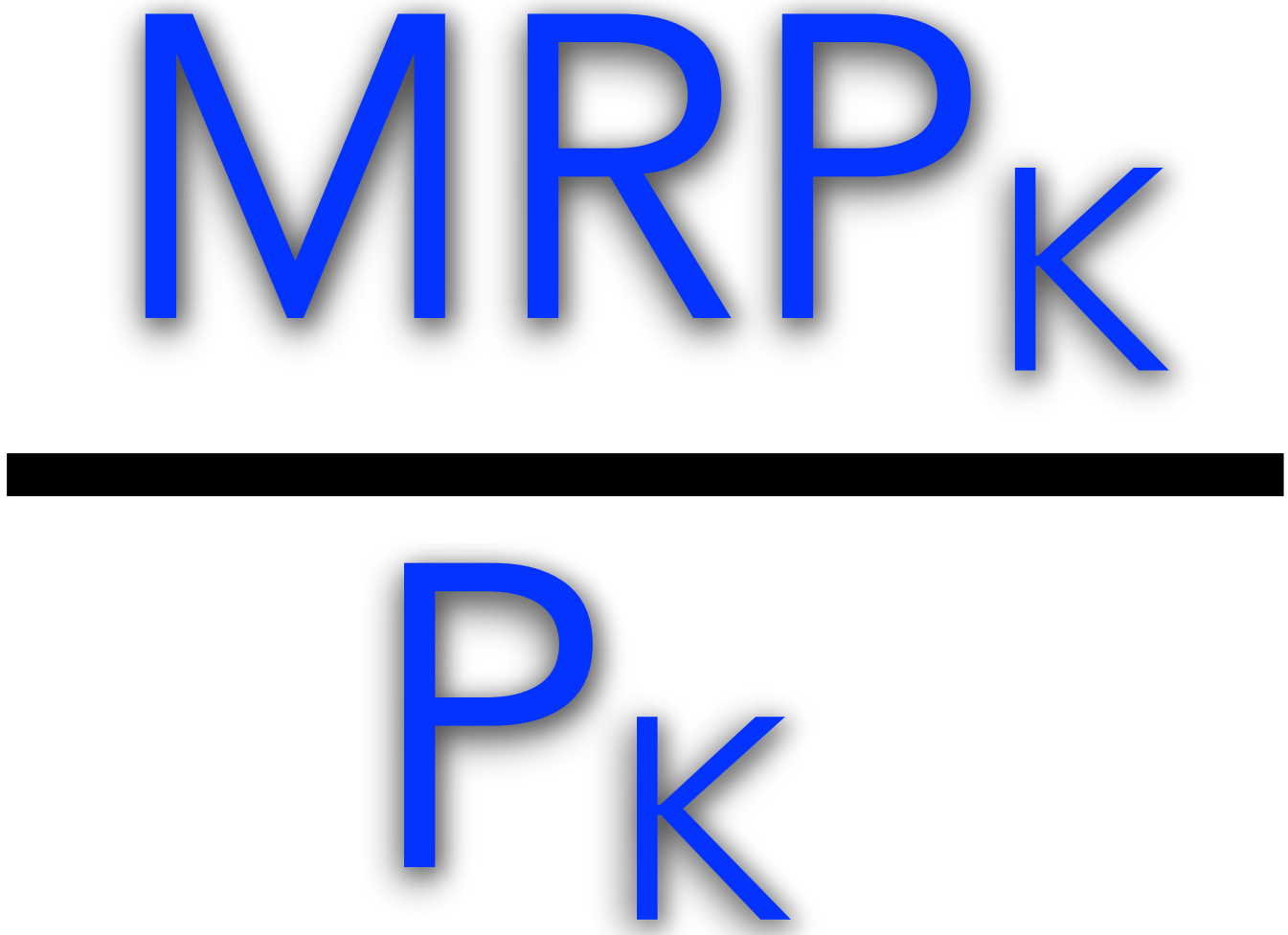
We know the firm has hired the optimum number of workers if $MRP_L = P_L$ which means that:

We know the firm has purchased the optimum number of machines if $MRP_K = P_K$ which means that:


MRPK
PK
=1

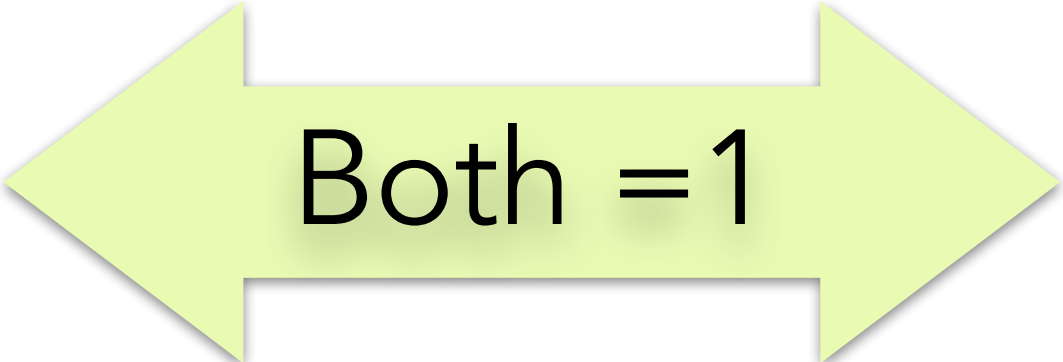

MRP_L
P_L
=1

We know the firm has purchased the optimum mix of machines and labor when these two conditions hold at the same time:


$\frac{MRP_K}{P_K}$


MRP_L
P_L

We know the firm has purchased the optimum mix of machines and labor when the revenue per dollar spent on Labor is the same as the revenue per dollar spent on Capital


Both =1

We know the firm has purchased the optimum mix of machines and labor when these two conditions hold at the same time:

$$\frac{MRP_L}{P_L} = 1 \quad \text{Both } = 1 \quad \frac{MRP_K}{P_K} = 1$$

$$\frac{MRP_L}{P_L} = \frac{MRP_K}{P_K}$$

We know the firm has purchased the optimum mix of machines and labor when the revenue per dollar spent on Labor is the same as the revenue per dollar spent on Capital