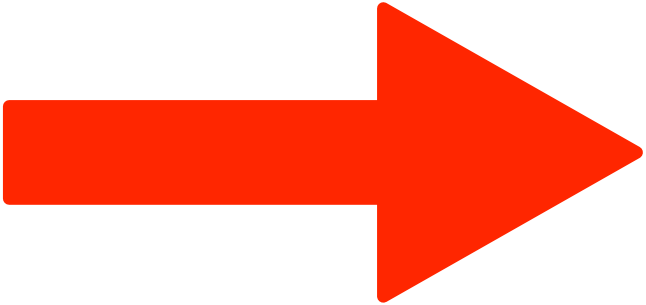
We know the firm has purchased the optimum ***mix*** *of machines* ***and*** *labor when*

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

$$\frac{MRP_L}{P_L}$$

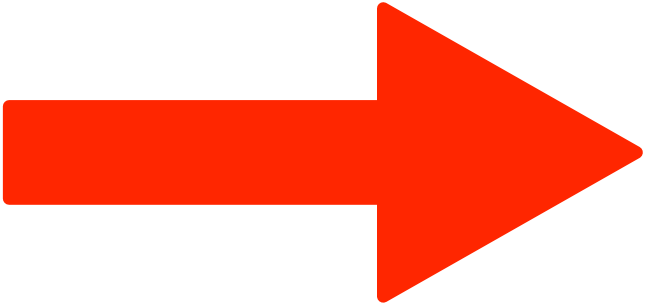


Spend the next dollar on ***capital***

$$\frac{MRP_L}{P_L}$$


$\frac{MRP_K}{P_K} >$

The firm gets ***more*** *revenue if it spends the next dollar on capital than if it spends that dollar on labor*



Spend the next dollar on ***labor***

$$\frac{MRP_L}{P_L}$$


$\frac{MRP_K}{P_K} <$

The firm gets ***more*** *revenue if it spends the next dollar on labor than if it spends that dollar on capital*

Revenue per dollar spent on Labor *is the same as*

the revenue per dollar spent on machines

Revenue per dollar spent on Labor is the same as the *revenue per dollar spent on machines*

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

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

The firm gets ***more*** *revenue if it spends the next dollar on capital than if it spends that dollar on labor*

→ *Spend the next dollar on* ***capital***

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

The firm gets ***more*** *revenue if it spends the next dollar on labor than if it spends that dollar on capital*

→ *Spend the next dollar on* ***labor***