Bsp: $TC(y) = y^2$

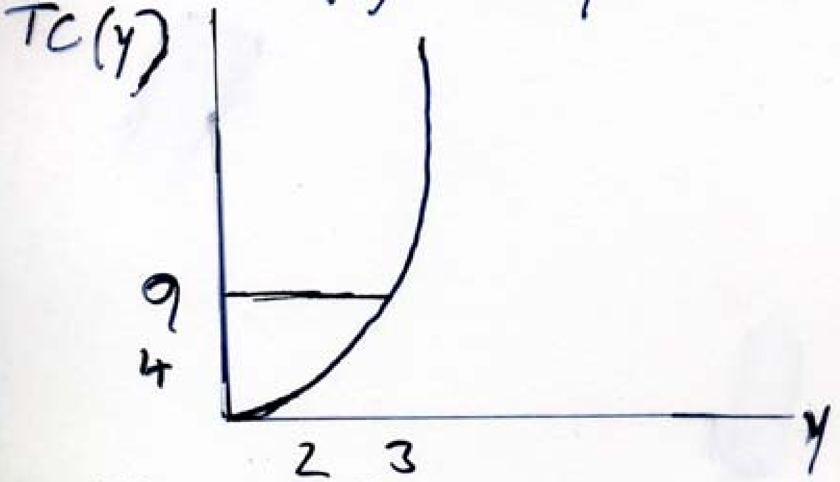
$F = 0$

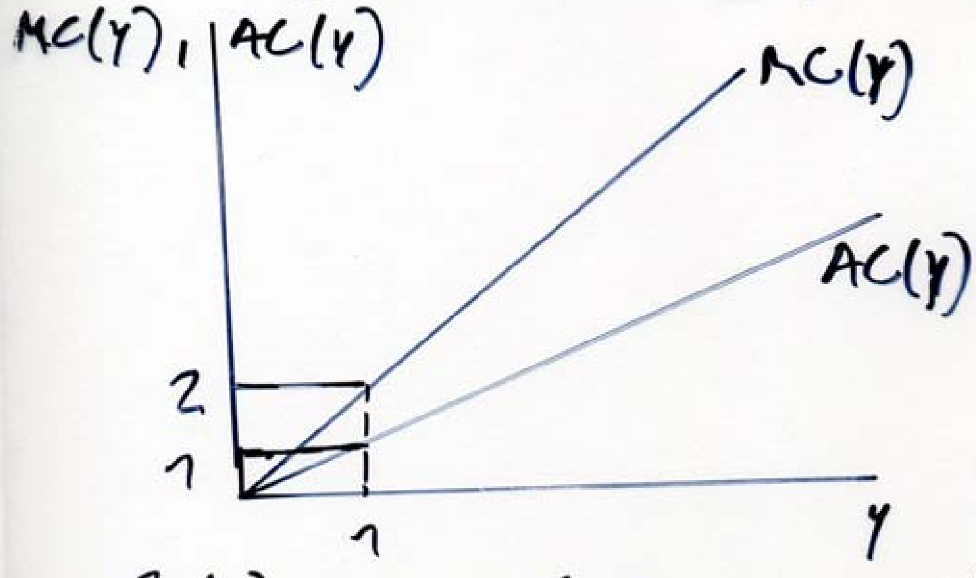
$VC(y) = y^2$

$ATC = y = AVC(y)$

$MC(y) = 2y$

Konvexe Kostenfunktion
keine Fixkosten

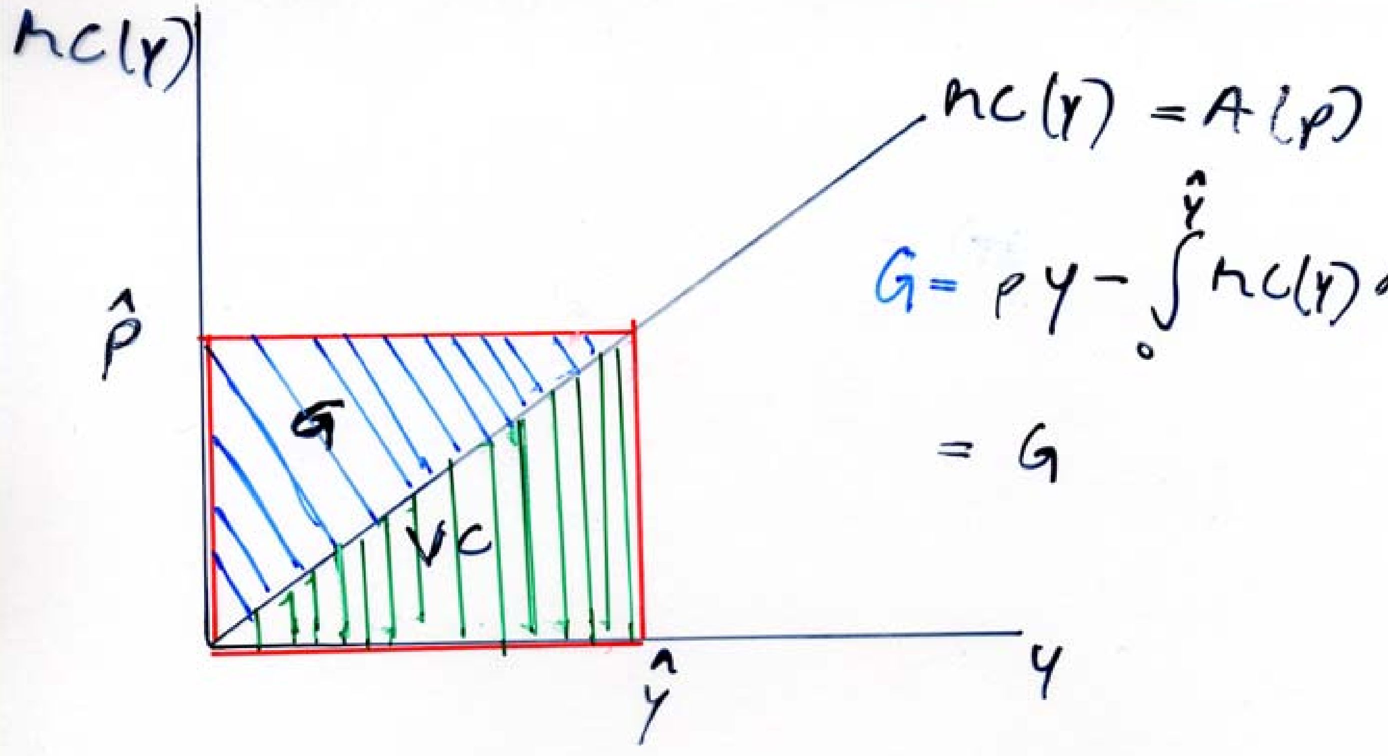




$G(y) = py - C(y) \to \max!$

$\to \boxed{p = MC(y)} \to$ Grenzkostenkurve

= Angebotskurve (Konkurrenz), weil die Firma so produziert, dass $p = MC(y)$ gibt.

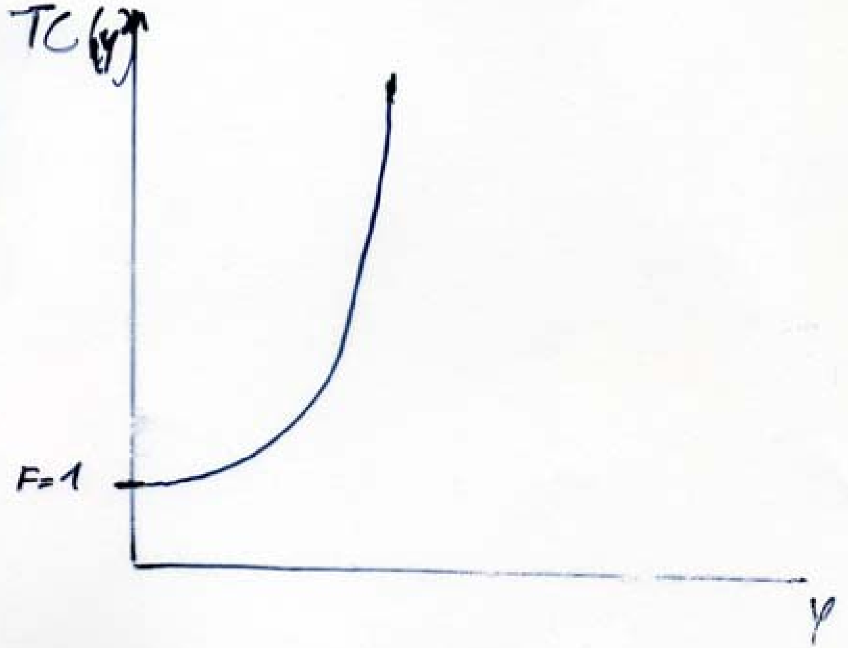


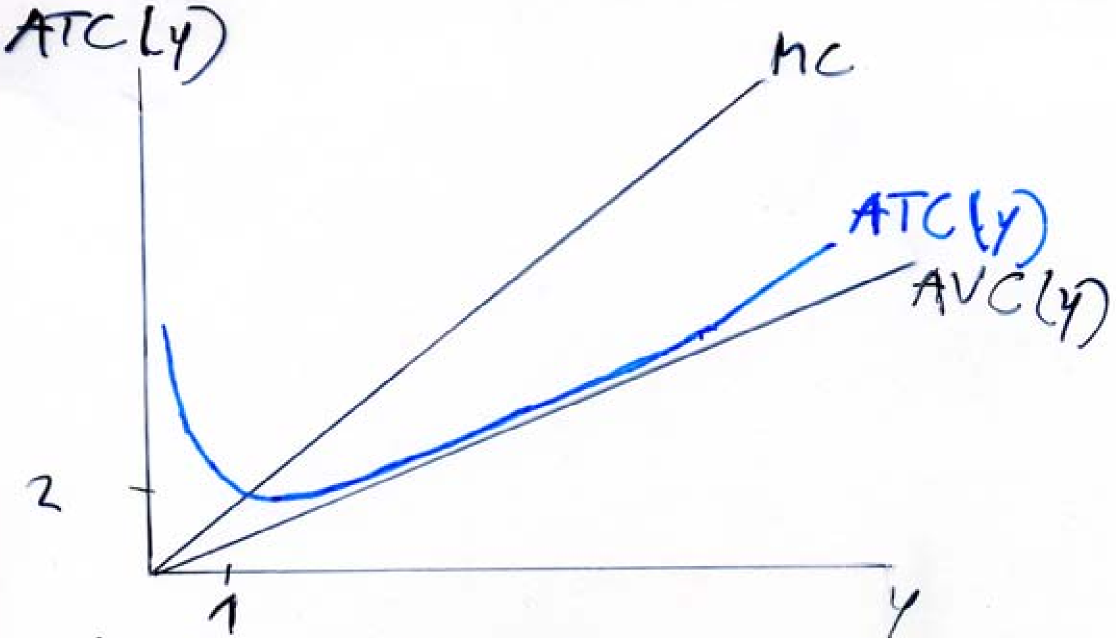
$$G = py - \int_0^{\hat{y}} mc(y)\,dy$$

$$= G$$

2. Beispiel:

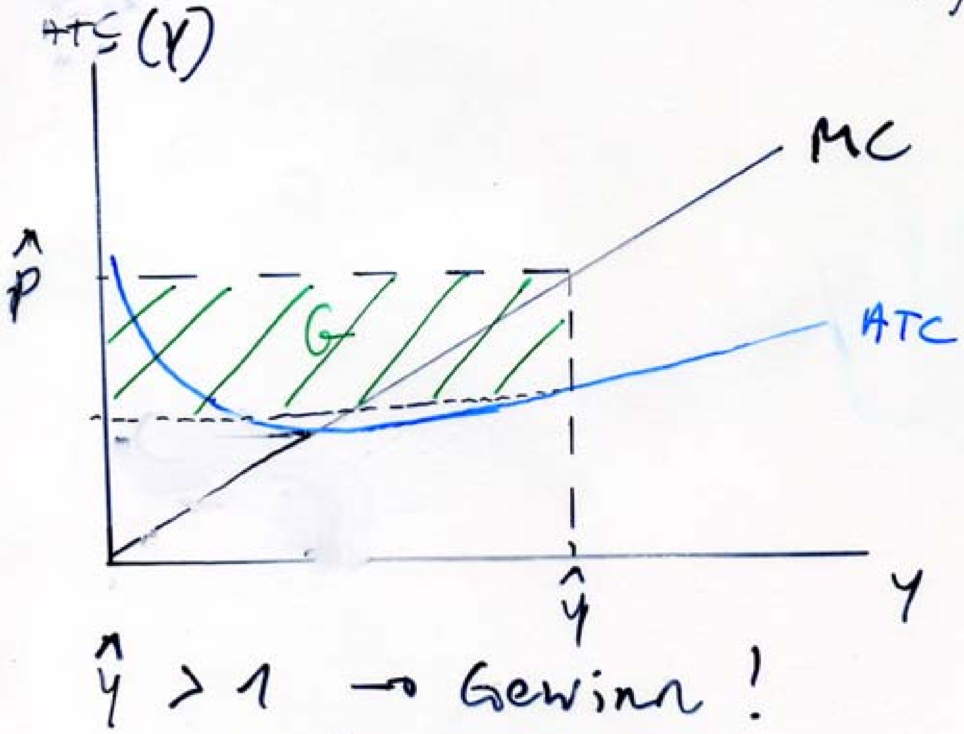
$$TC(y) = y^2 + 1$$
$$F = 1 \quad \text{(neu)}$$
$$VC(y) = y^2$$
$$mc(y) = 2y$$
$$ATC(y) = y + \frac{1}{y}$$
$$AVC(y) = y$$





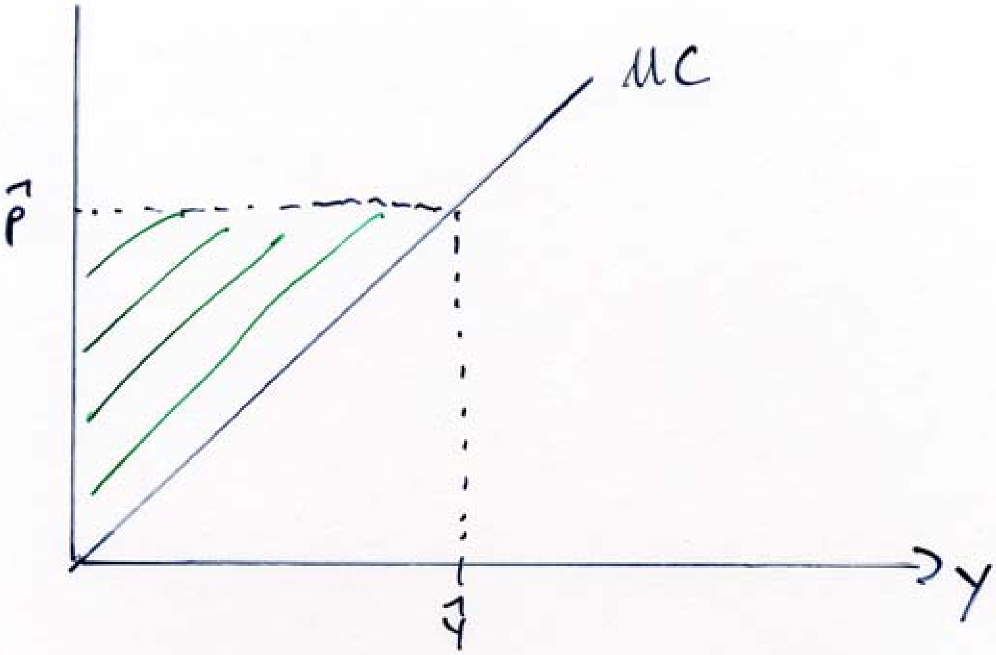
$\hat{y} < 1 \rightarrow$ Verlust $(p < 2)$

Umsatz $= py$; y reicht nicht aus,
um Kosten $= ATC(\hat{y}) \cdot \hat{y}$ zu decken



$\hat{y} > 1 \rightarrow$ Gewinn!

$G = \hat{p}\hat{y} - ATC(\hat{y}) \cdot \hat{y}$



/// $= \hat{p}\hat{y} - VC\,\hat{y}$

$= \hat{p}\hat{y} - \int_0^{\hat{y}} MC(y)\,dy$

= Erlös – variable Kosten

= Gewinn + Fixkosten (da Gewinn = Erlös – variable Kosten – Fixkosten)

= PRODUZENTENRENTE