

Analyseansatz für f = 1		Bertrand-Preiswettbewerb		Cournot-Mengenwettbewerb	
		Horizontale Differenzierung	Vertikale Differenzierung	Horizontale Differenzierung	Vertikale Differenzierung
Gewinnfunktion		$\pi_f = (p_f - c_f) \cdot D_f(\cdot)$ mit $D_f(p_1^*, p_2, V_1, V_2)$ für $f = 1$		$\pi_f = [P_f(\cdot) - c_f] \cdot y_f$ mit $P_f(y_1^*, y_2, V_1, V_2)$ für $f = 1$	
Optimalitätsbedingung		$\frac{\partial \pi_f}{\partial p_f} = D_f(\cdot) + \frac{\partial D_f(\cdot)}{\partial p_f} (p_f - c_f) = 0$		$\frac{\partial \pi_f}{\partial y_f} = [P_f(\cdot) - c_f] + \frac{\partial P_f(\cdot)}{\partial y_f} \cdot y_f = 0$	
Grafische Darstellung von Gewinnfunktion und ihrer Ableitung nach der Strategievariable					
Nachfrageeffekte	a) Effekt auf Nachfragefunktion $D_f(p_1, p_2, V_1, V_2)$	$\frac{\partial D_1}{\partial p_1} < 0$ $\frac{\partial D_1}{\partial p_2} > 0$ (Annahme: $ \frac{\partial D_1}{\partial p_1} > \frac{\partial D_1}{\partial p_2}$) $\frac{\partial D_1}{\partial V_1} = ?$ $\frac{\partial D_1}{\partial V_2} > 0$, wenn $V_2 > V_1$ $\frac{\partial D_1}{\partial V_1} > 0$ $\frac{\partial D_1}{\partial V_2} < 0$, wenn $V_2 < V_1$ $\frac{\partial D_1}{\partial V_2} < 0$		Diese Zelle bleibt frei.	
	b) Effekt auf Preissensibilität $\frac{\partial D_1(p_1, p_2, V_1, V_2)}{\partial p_f}$	$\frac{\partial^2 D_1}{\partial p_1^2} = ?$ $\frac{\partial^2 D_1}{\partial p_1 \partial p_2} = ?$ Nicht zwingend: $\frac{\partial^2 D_1}{\partial p_1 \partial V_1} > 0$ wenn $V_1 < V_2$ bzw. $\frac{\partial^2 D_1}{\partial p_1 \partial V_1} < 0$ wenn $V_1 > V_2$ Nicht zwingend: $\frac{\partial^2 D_1}{\partial p_1 \partial V_2} > 0$ wenn $V_2 < V_1$ bzw. $\frac{\partial^2 D_1}{\partial p_1 \partial V_2} < 0$ wenn $V_2 > V_1$			
Preiseffekte	a) Effekt auf Hilfsfunktion $P_f(p_2, y_1, V_1, V_2)$	Diese Zelle bleibt frei.		<p>$1 > \frac{\partial p_1}{\partial p_2} > 0$ (wegen Annahme: $\frac{\partial D_1}{\partial p_1} > \frac{\partial D_1}{\partial p_2}$)</p> <p>$\frac{\partial p_1}{\partial y_1} < 0$</p> <p>$\frac{\partial p_1}{\partial V_1} > 0$ wenn $\frac{\partial D_1}{\partial V_1} > 0$ bzw. $\frac{\partial p_1}{\partial V_1} < 0$ wenn $\frac{\partial D_1}{\partial V_1} < 0$ $\frac{\partial p_1}{\partial V_2} > 0$ wenn $\frac{\partial D_1}{\partial V_2} > 0$ bzw. $\frac{\partial p_1}{\partial V_2} < 0$ wenn $\frac{\partial D_1}{\partial V_2} < 0$</p>	
	b) Effekt auf inverse Nachfragefunktion $P_f(y_1, y_2, V_1, V_2)$			$\frac{\partial P_1}{\partial y_1} < 0$ $\frac{\partial P_1}{\partial y_2} < 0$ (Annahme: $\frac{\partial P_1}{\partial y_1} < \frac{\partial P_1}{\partial y_2}$ „Eigenmengeneffekt“ stärker negativ) $\frac{\partial P_1}{\partial V_1} > 0$ u. $\frac{\partial P_2}{\partial V_1} > 0$ $\frac{\partial P_1}{\partial V_1} = ?$ falls $\frac{\partial D_1}{\partial V_1} > 0$ u. $\frac{\partial D_2}{\partial V_1} > 0$ $\frac{\partial P_1}{\partial V_2} = ?$ $\frac{\partial P_1}{\partial V_1} < 0$ u. $\frac{\partial P_2}{\partial V_1} < 0$ falls $\frac{\partial D_1}{\partial V_1} < 0$ u. $\frac{\partial D_2}{\partial V_1} < 0$ in beiden anderen Fällen unbestimmt	
	c) Effekt auf Preissensibilität $\frac{\partial P_1(y_1, y_2, V_1, V_2)}{\partial y_f}$			$\frac{\partial^2 P_1}{\partial y_1^2} = ?$ $\frac{\partial^2 P_1}{\partial y_1 \partial y_2} = ?$ $\frac{\partial^2 P_1}{\partial y_1 \partial V_1} = ?$ $\frac{\partial^2 P_1}{\partial y_1 \partial V_2} = ?$	
Reaktionsfunktion	a) Nachfrageinduzierter Effekt auf Reaktionsfunktion $R_f(p_2, V_1, V_2)$ (Preiswettbewerb) bzw. $R_f(y_2, V_1, V_2)$ (Mengenwettbewerb)	<p>$1 > \frac{\partial R_1}{\partial p_2} > 0$</p> <p>$\frac{\partial R_1}{\partial V_1} = ?$ $\frac{\partial R_1}{\partial V_2} < 0$, wenn $V_2 < V_1$ $\frac{\partial R_1}{\partial V_1} > 0$ $\frac{\partial R_1}{\partial V_2} > 0$, wenn $V_2 > V_1$ $\frac{\partial R_1}{\partial V_2} < 0$</p>		<p>$-1 < \frac{\partial R_1}{\partial y_2} < 0$</p> <p>$\frac{\partial R_1}{\partial V_1} = ?$ $\frac{\partial R_1}{\partial V_2} = ?$</p>	
	alternativ (je nach Aufgabe) b) Kosteninduzierte Änderungen	$\frac{\partial R_1}{\partial c_1} > 0$ $\frac{\partial R_1}{\partial c_2} > 0$		$\frac{\partial R_1}{\partial c_1} < 0$ $\frac{\partial R_1}{\partial c_2} > 0$	
Gleichgewicht	Effekt auf Gleichgewichtsmengen $y_1^* = D_1(p_1^*, p_2, V_1, V_2), y_2^* = D_2(p_1, V_1, V_2, V_2)$ (Preiswettbewerb) bzw. Gleichgewichtspreise $p_1^* = P_1(y_1^*, y_2, V_1, V_2), p_2^* = P_2(y_1, V_1, V_2, V_2)$ (Mengenwettbewerb)	$\frac{\partial y_1^*}{\partial p_2} = \frac{\partial D_1}{\partial p_2} + \frac{\partial p_1^*}{\partial p_2} + \frac{\partial D_1}{\partial p_2} = ?$ $\frac{\partial y_1^*}{\partial V_1} = \frac{\partial D_1}{\partial V_1} + \frac{\partial p_1^*}{\partial V_1} + \frac{\partial D_1}{\partial V_1} + \frac{\partial D_1}{\partial V_1} = ?$ $\frac{\partial y_1^*}{\partial V_2} = \frac{\partial D_1}{\partial V_2} + \frac{\partial p_1^*}{\partial V_2} + \frac{\partial D_1}{\partial V_2} + \frac{\partial D_1}{\partial V_2} = ?$		$\frac{\partial p_1^*}{\partial y_2} = \frac{\partial P_1}{\partial y_2} + \frac{\partial y_1^*}{\partial y_2} + \frac{\partial P_1}{\partial y_2} = ?$ $\frac{\partial p_1^*}{\partial V_1} = \frac{\partial P_1}{\partial V_1} + \frac{\partial y_1^*}{\partial V_1} + \frac{\partial P_1}{\partial V_1} + \frac{\partial P_1}{\partial V_1} = ?$ $\frac{\partial p_1^*}{\partial V_2} = \frac{\partial P_1}{\partial V_2} + \frac{\partial y_1^*}{\partial V_2} + \frac{\partial P_1}{\partial V_2} + \frac{\partial P_1}{\partial V_2} = ?$	
Gewinn	Effekt auf Gewinnfunktion $\pi_1^* = [p_1^* (p_2, V_1, V_2) - c_1] \cdot D_1(p_1^*, p_2, V_1, V_2)$ (Preiswettbewerb) bzw. $\pi_1^* = [P_1(y_1^*, y_2, V_1, V_2) - c_1] \cdot y_1^*$ (Mengenwettbewerb)	$\frac{\partial \pi_1^*}{\partial p_2} = [p_1^* (\cdot) - c_1] \cdot \frac{\partial D_1}{\partial p_2} > 0$ $\frac{\partial \pi_1^*}{\partial V_1} = [p_1^* (\cdot) - c_1] \cdot \left(\frac{\partial D_1}{\partial p_2} \cdot \frac{\partial p_2^*}{\partial V_1} + \frac{\partial D_1}{\partial V_1} \right) = ?$ $\frac{\partial \pi_1^*}{\partial V_1} > 0$ $\frac{\partial \pi_1^*}{\partial V_2} = [p_1^* (\cdot) - c_1] \cdot \left(\frac{\partial D_1}{\partial p_2} \cdot \frac{\partial p_2^*}{\partial V_2} + \frac{\partial D_1}{\partial V_2} \right) = ?$ $\frac{\partial \pi_1^*}{\partial V_2} < 0$		$\frac{\partial \pi_1^*}{\partial y_2} = y_1^* \cdot \frac{\partial P_1}{\partial y_2} < 0$ $\frac{\partial \pi_1^*}{\partial V_1} = y_1^* (\cdot) \cdot \left(\frac{\partial P_1}{\partial y_2} \cdot \frac{\partial y_2^*}{\partial V_1} + \frac{\partial P_1}{\partial V_1} \right) = ?$ $\frac{\partial \pi_1^*}{\partial V_2} = y_1^* (\cdot) \cdot \left(\frac{\partial P_1}{\partial y_2} \cdot \frac{\partial y_2^*}{\partial V_2} + \frac{\partial P_1}{\partial V_2} \right) = ?$	