

$$S(G) = f(G-\alpha)p - c(G) - f(G)P$$

$$= P\{f(G-\alpha) - f(G)\} - c(G)$$

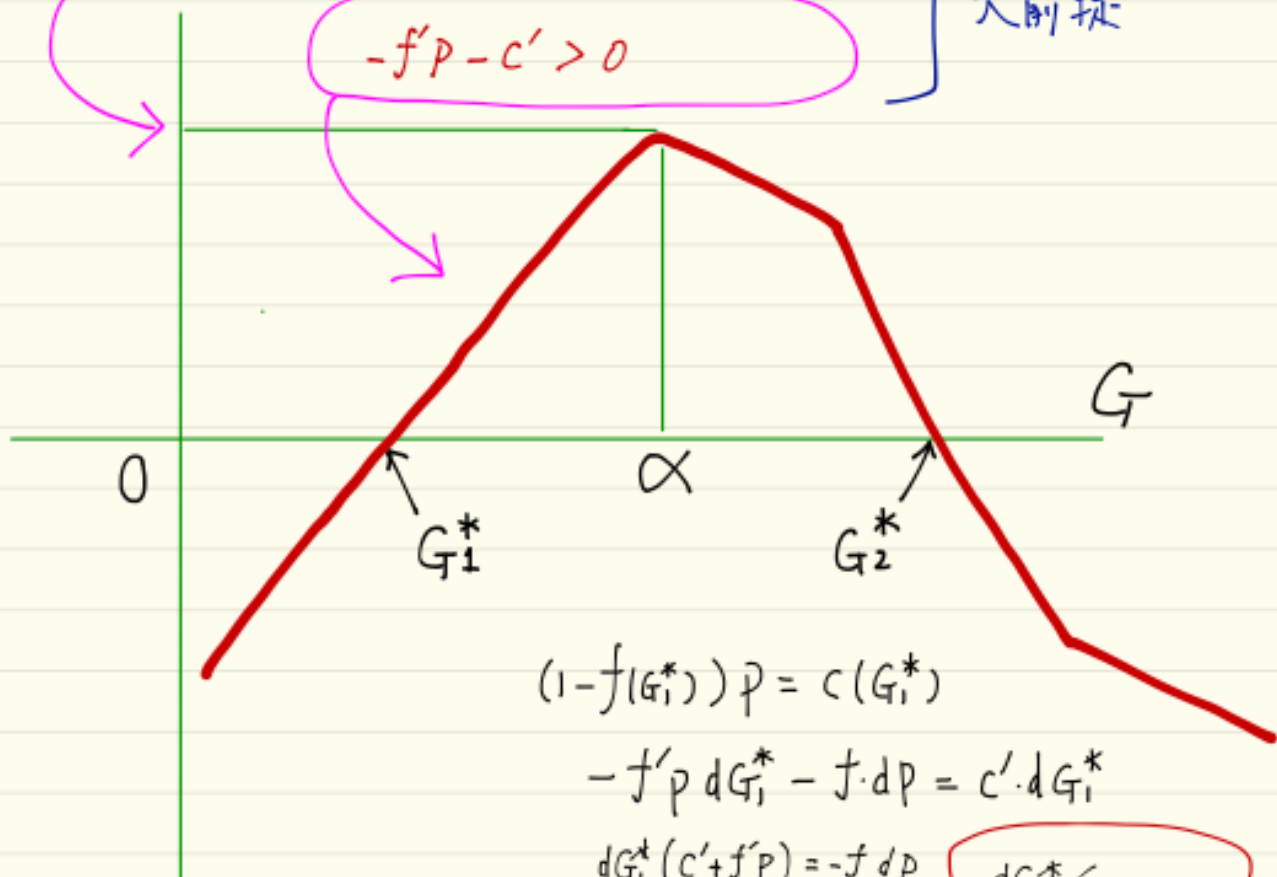
$S(G) > 0$  なら受講

$$= \begin{cases} -C_0 & \text{if } G \leq 0 \\ P(1-f(G)) - c(G) & \text{if } 0 \leq G \leq \alpha \\ P(f(G-\alpha) - f(G)) - c(G) & \text{if } \alpha \leq G \leq \bar{G} \\ P f(G-\alpha) - c(G) & \text{if } \bar{G} \leq G \leq \bar{G} + \alpha \\ -c(G) & \text{if } \bar{G} + \alpha \leq G \end{cases}$$

$$P(1-f(\alpha)) - c(\alpha) > 0$$

$$-f'p - c' > 0$$

学習効果が存在する  
大前提



$$(1-f(G_1^*))p = c(G_1^*)$$

$$-f'p dG_1^* - f \cdot dp = c' \cdot dG_1^*$$

$$dG_1^* (c' + f'p) = -f dp$$

↑ 微分

$$\frac{dG_1^*}{dp} > 0$$