



machine \rightarrow monopoly
 button \rightarrow competitive.

sewing machine & buttons are complementary products.

Originally, factories use labor to sew buttons.

The labor cost is 1¢ per button.

↳ IF the factory were to replace labor with any other method, the highest cost that they're willing to pay is 1¢ per button.

Suppose Firm 1 \Rightarrow sew \$10,000 button
 Firm 2 \Rightarrow sew 100 button

if $MC_{\text{machine}} = 0 \rightarrow$ how to price the machine to max profit?

MC button = 5¢

→ Give the machine for free and sell button that only works with that machine for 6¢ (5¢ + 1¢)

↑
cost opportunity cost for using labor.

	no machine	with machine
Firm 1	<p>pays $10,000 \times 0.05 = \\$500$ for buttons</p> <p>pays $10,000 \times 0.01 = \\$100$ for labor</p> <p>Total ⇒ \$600</p>	<p>pays 0 for machine</p> <p>pays $10,000 \times 0.06 = \\$600$</p> <p>machine company earns \$100 because it costs $10,000 \times 0.05$ for = 500\$ button</p>
Firm 2	<p>pays $100 \times 0.05 = \\$5$</p> <p>pays $100 \times 0.01 = \\$1$ for labor</p> <p>Total \$6</p>	<p>pay $100 \times 0.06 = \\$6$</p> <p>machine company earns \$1 because it costs $100 \times 0.05 = \\$5$ for buttons. But firm earns \$6. So, profit = $6 - 5 = 1$\$</p>