

1. Suppose that a production function takes the following form,

$$q = \ln(K^2L)$$

Let r and w be the prices for input K and L respectively. Then, answer the following questions.

- Does this production function display increasing, constant, or decreasing returns to scale? Explain why.
- Find elasticity substitution
- Formulate the cost minimization problem (you may denote a target output level by q).
- Solve the minimization problem and derive conditional input demand for K and L
- Derive the (minimum) cost function and explain its properties, $c = (r, w, q)$

Bahasa:

1. Misalkan perusahaan memproduksi berdasarkan fungsi berikut ini:

$$q = \ln(K^2L)$$

Jika harga input K adalah r dan harga input L adalah w . Jawab pertanyaan berikut ini:

- Tentukan apakah fungsi tersebut IRS, CRS, atau DRS?
- Tentukan nilai elastisitas substitusi-nya
- Formulasikan cost minimization problem!
- Cari solusi poin (c), dan tentukan conditional input demand untuk K dan L
- Tentukan juga fungsi biaya dan jelaskan sifat (*properties*) dari fungsi biaya tersebut [hints: $c = (r, w, q)$]

Kanopi FEBUI
Unity in Development