Labor Demand

Introduction

The Model

The firm's production function is

$$Q = A (1 - \exp(-0.1\ N),$$

where A is a technology factor (initially equal to 20) and N is labor.

Exercises

1.   Graph output, the marginal product of labor, and profits vs. N.

2.   Change the wage rate W and solve for the new profit maximizing N. Do this a few times to show the labor demand curve.

3.   Increase the market price P for the firm's output. What effect does this have on the firm's demand for labor curve?

4.   Change the technology factor A. Show the effects on the production function and the demand for labor curve.