

In-class Exercise: Production and Costs

Directions: Answer the following questions about production and costs facing a hypothetical firm. Work in groups of up to four people. All papers will be collected, but only one member's paper will be graded and all members of the group will receive the same grade.

By signing below, you agree that the following work represents the efforts of everyone in the group, and you are willing to accept as your own grade for the group project the grade earned from this representation of your group's work. Every member must agree to these terms to earn a non-zero grade for this assignment.

_____ Signature Group Member 1	_____ Print Name	_____ Date
_____ Signature Group Member 2	_____ Print Name	_____ Date
_____ Signature Group Member 3	_____ Print Name	_____ Date
_____ Signature Group Member 4	_____ Print Name	_____ Date

Suppose you own a sandwich shop business. The costs of running your business include \$500/week rent for your storefront, \$100/week for utilities, and \$7.50 per hour for labor. Suppose the sandwich shop is small, but its located on a big college campus, and sandwiches at many places across campus sell for \$5 each, regardless of how many are produced. Therefore, the additional revenue earned from producing an additional sandwich is \$5. Suppose the following production function shows how many sandwiches can be produced for different choices for how many hours of labor to hire in a given week.

<i>Labor</i>	<i>Output</i>	<i>TVC</i>	<i>TC</i>	<i>MC</i>	<i>MP_L</i>	<i>MRP</i>
0	0					
20	100					
40	190					
60	270					
80	340					
100	400					
120	450					
140	490					
160	520					
180	540					
200	550					

1. Fill in the table above.
2. Is the production of sandwiches subject to diminishing returns? Explain. Explain why it is common to have diminishing returns.

