

IN-CLASS ASSIGNMENT: Production (LR)

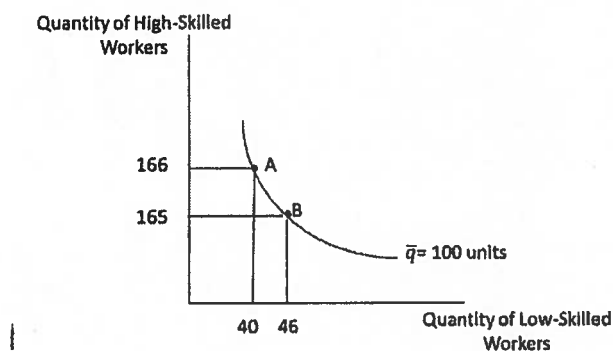
Wednesday, March 18, 2015

Name: ANSWER KEY

1.
a. What does the MRTS illustrate?

The MRTS illustrates how a firm substitutes between inputs (usually K & L) to keep output constant.

- b. Using the figure below, calculate the MRTS between low-skilled and high-skilled workers in the United States. Provide a sentence or two that describes this particular MRTS.



$$MRTS = \frac{MP_{Low}}{MP_{High}} = \frac{\Delta High}{\Delta Low} = \frac{166 - 165}{40 - 46} = \boxed{-\frac{1}{6}}$$

The firm will substitute 1 high skilled worker for 6 low skilled workers to keep output constant at 100 units.

- c. Assume now that high-skilled and low-skilled workers are perfect substitutes. Graph out the new isoquants.

