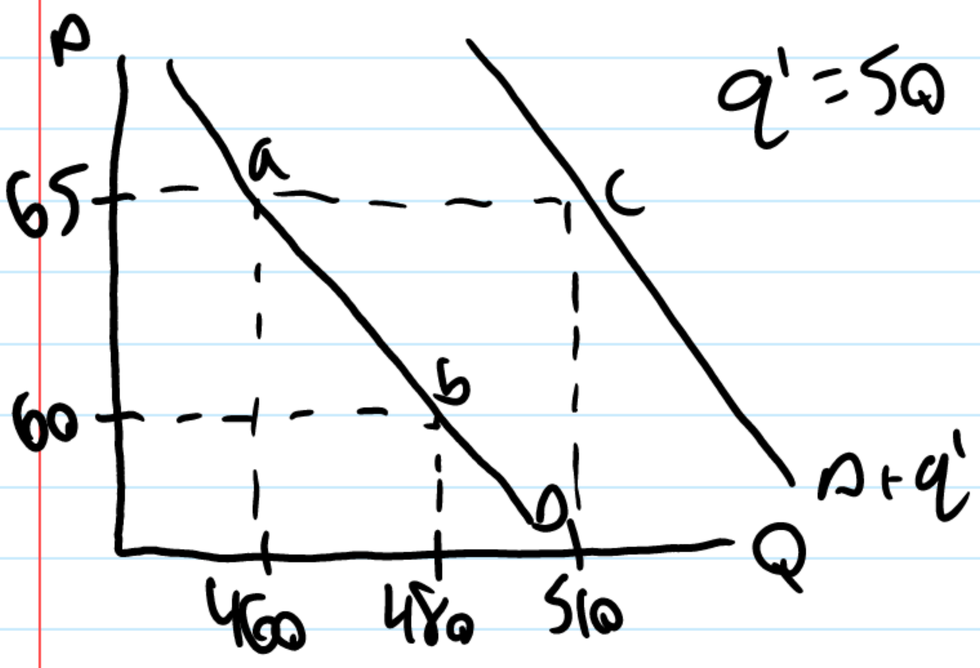
HW 6 Opportunity Cost of Inputs 2

Sunday, October 4, 2020 5:20 PM

Passed solution review

Suppose a project needs to hire 50 electricians. At the initial wage of 60K/year (including benefits) 480 are currently employed in the local area and 20 are estimated to be unemployed. The MEBT is 0.2. After electricians are hired for the project, the local wage increases to 65K/year and the number employed locally increases to 510. Estimate the opportunity cost of hiring the workers. Draw a diagram to illustrate. Explain, and defend any assumptions you make.



$abc = \frac{1}{2}(65-60)(.51-.46) = 125k$

$SC = (510-460)\cdot 65k - abc + (MEBT)(510-460)(65000)$
$SC = (50)\cdot 65k - 125k + (.2\cdot 50\cdot 65000)$
$SC = 3,175,000$

We're assuming opportunity cost = social cost