Answer on Question 63843 -Economics - Microeconomics

A perfectly competitive labor market where Ld represents the quantity of labor demanded, Ls the quantity of labor supplied and W the wage rate, is described by the following functions:

Ld= 200-2.5W

Ls= -70+5W

Ld=Ls

     a. What is the equilibrium wage rate in the market?

     b. How many workers will be employed?

     c. Suppose the government sets a minimum wage of 48 in the market. What will be the effect of introducing minimum wage?

     d. What was the wage bill before the introduction of the minimum wage?

     e. What will be the wage bill after the introduction of the minimum wage?

Answer.
a.   Equilibrium wage rate in the market is calculated from equation
200-2.5W=-70+5W
270=7.5W
W=36

b.   Quantity of workers is
L=200-2.5*36=110

c.   Introducing of minimum wage $48 makes excess supply on the market (unemployment), at the rate of
-70+5*48-(200-2.5*48)=90 workers

d.   36*110=$3960
e.   48*(200-2.5*48)=$3840