Answer on Question #45003, Economics - Macroeconomics

Assignment

The inverse demand and supply function for a commodity are give by:
PX=0.25QX+6.25 and,QX=2Px-5,respectively.
a.Determine the equilibrium price and quantity.
b.Show your result with the help of diagram.

Solution

First of all we can determine the equilibrium price and quantity:

PX=0.25QX+6.25
QX=2Px-5
PX=0.25(2Px-5)+6.25
PX=0.5Px-1.25+6.25
0.5 Px=5
Px=10
QX=2Px-5=20-5=15
Px=10
QX=15

We can show it graphically: