4.4

Answer:

Equation of equilibrium is as follows -

$Y = C + I$

Substituting value of C and I in above equation.

$Y = 50 + 0.8Y + 0.1W + 200$

$Y - 0.8Y = 50 + 0.1*500 + 200$

$Y = 1500$

The equilibrium level of GDP (Y) is 1500.

$C = 50 + 0.8Y + 0.1W$

$= 50 + 0.8*1500 + 0.1*500$

$= 1300$

The equilibrium level of consumption is 1300.

$S = Y - C$

$S = 1500 - 1300$

$S = 200$

The equilibrium level of saving is 200.

Now, wealth has increased by 100 percent to 1,000.

Equation of equilibrium is as follows -

$Y = C + I$

Substituting value of C and I in above equation.

$Y = 50 + 0.8Y + 0.1W + 200$

$Y - 0.8Y = 50 + 0.1*1,000 + 200$

$Y = 1750$

The new equilibrium level of GDP (Y) is 1750.

$C = 50 + 0.08Y + 0.1W$

$= 50 + 0.8*1750 + 0.1*1000$

$= 1550$

The new equilibrium level of consumption is 1550.

$S = Y - C$

$S = 1750 - 1550$

$S = 200$

The new equilibrium level of saving is 200.

5.4

Value of MPS depends on the change in level of savings in economy with respect to change in level of disposable income in the economy.

So, increase in savings as fraction of disposable inocme implies an increase in size of MPS.

The sum of MPC and MPS is 1.

So, this increase in size of MPS will bring a decrease in size of MPC.

Alternatively, it can be said that as households are increasing their savings, they must be reducing their consumption. Reduction in consumption directly result in a decrease in size of MPC.

Size of multiplier depends on the size of MPC.

So, this decrease in size of MPC will bring a decrease in size of multiplier as well.

Size of multiplier determines the ultimate or final changes in aggregate output due to initial change in any component of aggregate demand.

As size of Multiplier is decreasing due to increase in savings, the ultimate or final change in equilibrium output due to change in planned investment (component of aggregate demand) will be less than the ultimate or final change in equilibrium output due to change in planned investment, if size of multiplier had remained same as previous.