

**Answer on Question #47601, Economics - Macroeconomics
Assignment**

given that $c = 1000 + 0.625y_d$, $i = 500$, $g = 500$, $x = 375$, $im = 750$, $t = 200 + 0.2y$, $y_d = y - t$

- solve for equilibrium y and c
- if I increased by 100, what happens to y
- draw the old and new function ($I=100$) clearly labelling the graph

Solution

We can write an equation:

$$Y = C + I + G + NE,$$

where

C- Consumer spending

I - Investment costs

G - The government spending

NE - Net exports shows how foreign spending on goods and services produced in the country exceed the country costs for the purchase of goods and services produced in other countries.

So,

$$Y = 1000 + 0.625(Y - T) + 500 + 500 + (375 - 750) = 1000 + 0.625(Y - (200 + 0.2Y)) + 500 + 500 + (375 - 750) = 0.625(0.8Y - 200) + 1625 = 0.5Y - 125 + 1625 = 0.5Y + 1500$$

$$0.5Y = 1500$$

$$Y = 3000$$

$$C = 1000 + 0.625(0.8Y - 200) = 1000 + 0.625 * 2200 = 2375$$

if I increased by 100 Y will be the following:

$$Y = 1000 + 0.625(Y - T) + (500 + 100) + 500 + (375 - 750) = 3100$$

