a) Y = G+I+C

Y = 1000 + 250 + 100 +0,75*(Y-(-200+0,5Y))

Y = 0,375Y + 1500

0,625Y = 1500

Y = 2400

b) We need to compare taxes with government consumption:

T = -200 + 0,5* 2400 = 1000

G = 1000

T=G. It's mean, that closed economy hasn't budget deficit

c) When government increases public consumption to G = 1100:

Y = 1100 + 250 + 100 +0,75*(Y-(-200+0,5Y))

Y = 0,375Y + 1600

0,625Y = 1600

Y = 2560

d) After the increase of public consumption T = -200 +2560*0,5 = 1080

G =1100

So, budget deficit : T-G = 1080 – 1100 = -20

e) Cost multiplier shows how many times the total increase (decrease) the total income exceeds the initial increase (decrease) autonomous expenditures.

In this case multiplier is $\mu = \frac{\Delta Y}{\Delta A} = \frac{160}{100} = 1,6$