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Help

## Explanation of Week 3 Quiz Question #30 - pasted here



Hi, I got a question wrong on this week 3's quiz, but got the rest of them correct. I was wondering if someone could help explain this one I got incorrect. It is pasted below. Thanks.

## Question 30

Suppose the U.S. permanently decreases defense spending by \$100 billion after troops pull out of Afghanistan. How much will GDP be reduced assuming an MPC of 0.75?

## **Answer Choices:**

\$500 billion

\$300 billion

\$100 billion

\$400 billion

\$200 billion





The answer is \$400 billion. Refer to the multiplier formula for closing a GDP Gap. The necessary expenditure to close a gap = gap/multiplier. In this case, the \$100 billion reduction is treated as the necessary expenditure. So, \$100b = gap/4. We know the multiplier or denominator of the equation is 4 because the multiplier = 1/1-MPC = 1/1-.75 = 1/.25 = 4. So, \$100b = gap/4. Rephrased, GAP = \$100b \* 4 = \$400b.

Look at it another way. If there were an inflationary gap of \$400b and the MPC were .75, by how much would the government have to cut spending to close this gap? Well, we know the multiplier is 4. \$400b/4 = \$100b. So, we know that a \$100b reduction in spending will reduce GDP by \$400b. Thus, a reduction in defense spending of \$100b will reduce GDP BY \$400b when the MPC is .75.







Thank you very much for your help! ;-)



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To put it more simply, we know the multiplier is 4 because multiplier = 1/1-MPC=1/1-.75 = 1/.25 = 4. Therefore, A \$100b change in spending will have a \$400b impact on GDP.



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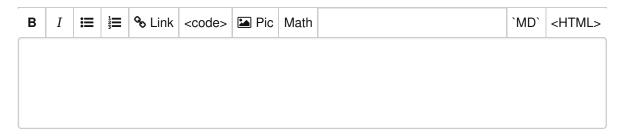
Anonymous · 3 hours ago %

i don't think we're allowed to be discussing the exact quiz questions/answers on the discussion forums. use pseudo numbers if you have a doubt

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