

Systems of Inequalities Mini-Quiz

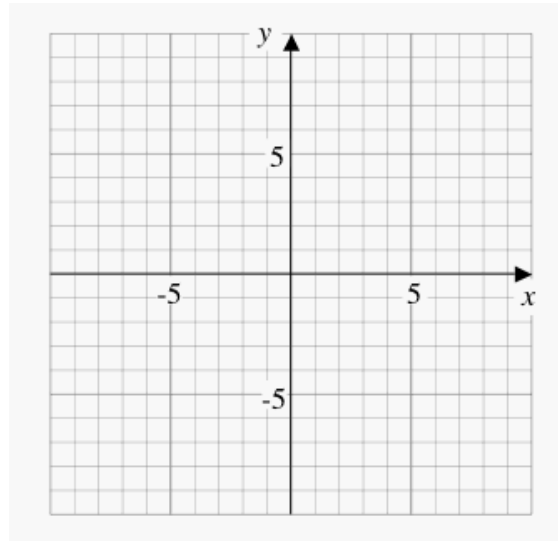
Mark: ____ / 15

1) a) Graph the followings System of Inequalities. (Value:4)

***Note: Be careful of < vs ≤ to ensure you create the proper line*

a) $y \geq 3x - 3$

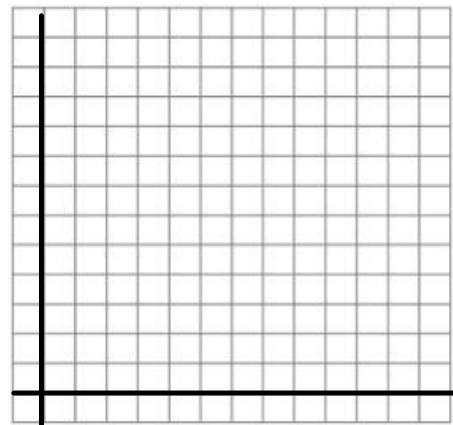
b) $2x + y < 4$



b) Give ONE solution for the system graphed above and verify that it is correct. (2)

2) Jeff has decided to sell items he makes at home. He chooses 2 items: a birdhouse he can sell for \$12 and a cutting board he can make for \$6. He wants to make at least \$100 and he is only able to make a maximum of 15 items with the supplies he has.

a) Define your variables and create a system of inequalities (2 inequalities). (Value: 4)



b) Graph the inequalities. (Value: 2)

c) Place a point on the graph that shows a possible combination of birdhouses and cutting boards that would make Jeff the amount he desires. (Value: 1)

d) How much would he make from this combination? (Show work below) Value: 2)