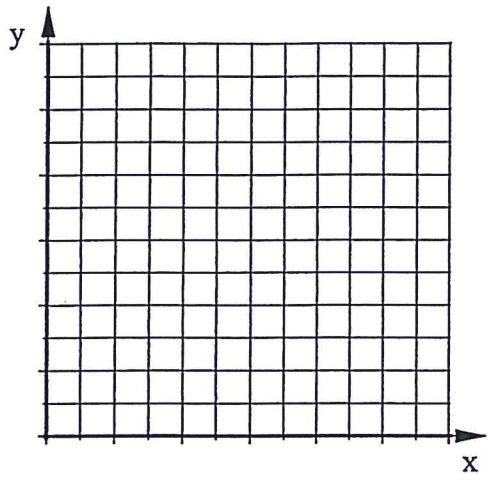
Bellwork Alg 2A Tuesday, November 29, 2016

1. Graph this system of inequalities. Shade the solution region a separate color.

$4 < x + y < 10$ $2 \leq x \leq 6$ $2x + 4y \geq 24$



2. A diner is serving Hamburgers and Hot Dogs. They charge $2.75 for each Hamburger meal and $2.25 for each Hot Dog meal. They want to make at least $500. They only have time to make 300 meals. They want to sell at least 100 Hamburgers. Write a system of FIVE inequalities to model this situation.

Bellwork Alg 2A Tuesday, November 29, 2016 ANSWERS

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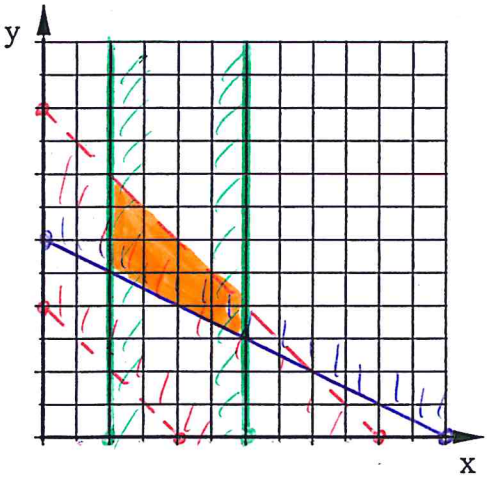
x-int = 12
y-int = 6
shade above



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x = # Hamburger meals
y = # Hot Dog meals

$x \geq 0$
$y \geq 0$

$2.75x + 2.25y \geq 500$
$x + y \leq 300$
$x \geq 100$