In designing Systems of Inequalities, some restrictions are TOO restrictive

Example: You have $20 to spend and you go to McDonalds and A&W

$x + y <= 20$

x is the money spent at McDonalds
y is the money spent at A&W

Too restrictive:
-- you spent $14 at McDonalds and $6 at A&W

Better:
-- you spent $14 at McDonalds

In designing Systems of Inequalities, some restrictions are TOO restrictive

Example: You have $20 to spend and you go to McDonalds and A&W

$x + y <= 20$

x is the money spent at McDonalds
y is the money spent at A&W

Even better:
-- you spent *at least* $14 at McDonalds

Once we shade in all of the regions, how Do we know which one is the one we want

(has the points that satisfy ALL of our Restrictions)

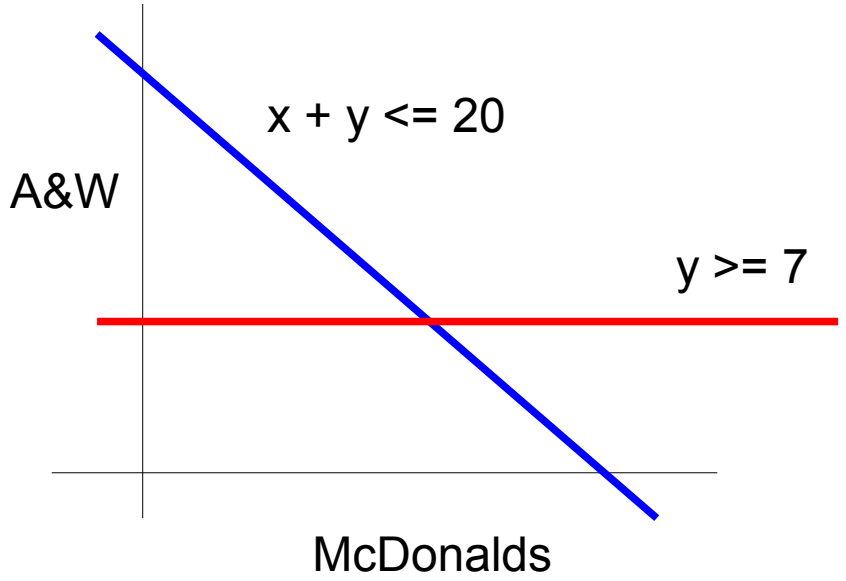
Test Points

-- Create a test point from each region
-- See to make sure if it works for EVERY inequality

Test point example: You have $20 to spend and you go to McDonalds and A&W

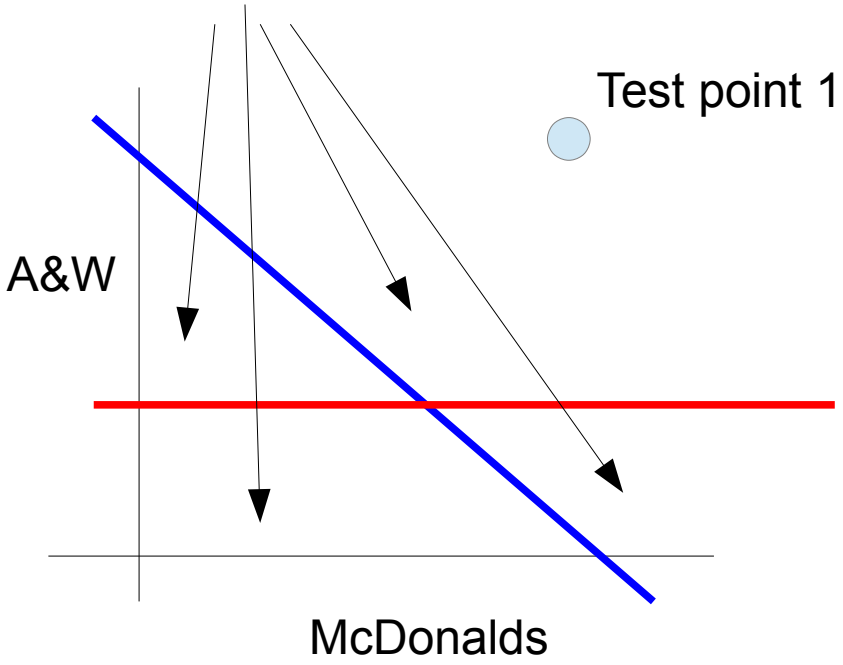
x is the money spent at McDonalds
y is the money spent at A&W

-- you can't spend more than $20 total
-- you spent at least $7 at A&W



Test point example: You have $20 to spend and you go to McDonalds and A&W

Which region is the one we want?



We try a test point in EACH to see if they work

x + y <= 20

y >= 7

Test point 1: (20, 20)

(20) + (20) <= 20
40 <= 20
FALSE

If it breaks ONE inequality, that region is NOT the one you want

Part 2 of the writing:

-- Create a test point for EACH region of your graph in order to prove which region you want as a success