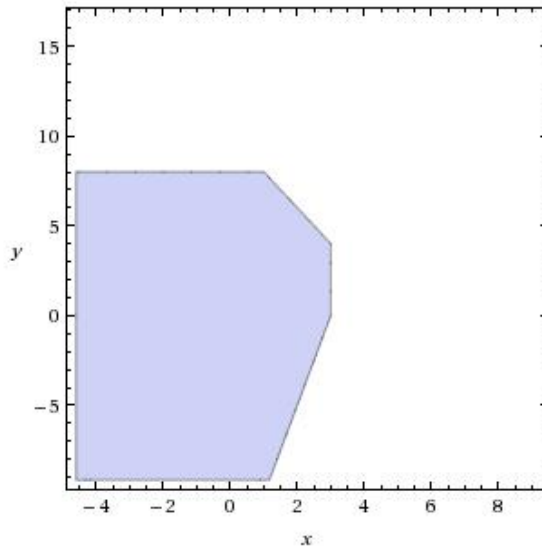


Input interpretation:

plot $2x + y < 10 \wedge 5x - y < 15 \wedge x < 3 \wedge y < 8$

Inequality plot:



Let's evaluate partial derivatives of $5x + 2y$

$$\frac{\partial f}{\partial x} = 5; \frac{\partial f}{\partial y} = 2$$

Consequently this function has no critical points inside the domain on the plot \Rightarrow it has critical points on the bound of domain. The curves that draw this domain are regular \Rightarrow the critical points can be only the points of intersection of curves.

These points are:

(3;0)

(3;4)

(1;8)

Substitution this values to f gives us that maximum value is achieved in the point (3;4) and equals 23.