Name: _____   Date: _____

Example Mac and Justin manufacture trail mix. Their supplier charges $25/kg for mixed nuts and $8/kg for chocolate covered craisins.

    a.   If Mac and Justin have $200 to spend on supplies, what mixtures could they make?

    b.   Can you make an equation to represent this situation?

    c.   Graph the equation from b), let nuts be the independent variable and raisins be the dependent variable. Please ensure the graph is properly labeled.
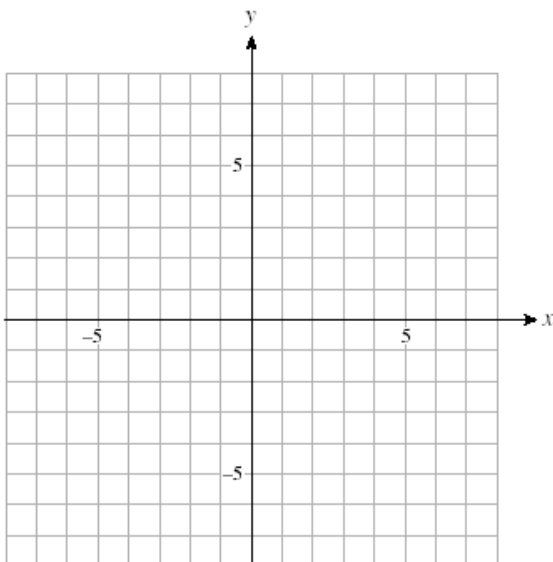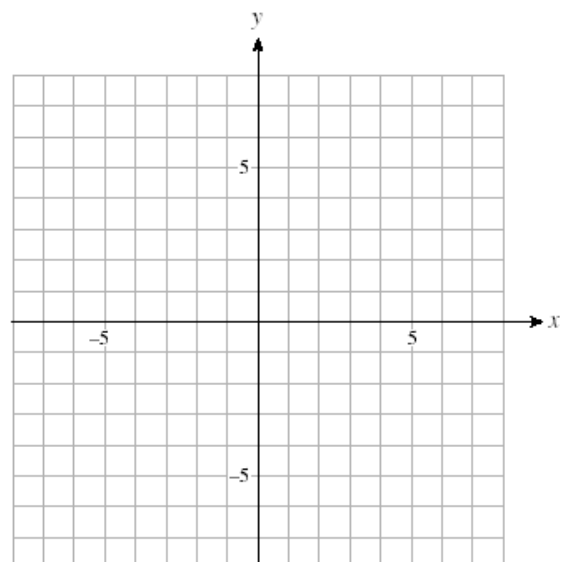
d. What is the domain and range of the graph you drew?

e. What does each region of the graph represent? Above the line? Below the line?

f.   The solution set is:

Example Graph each of the following inequalities:
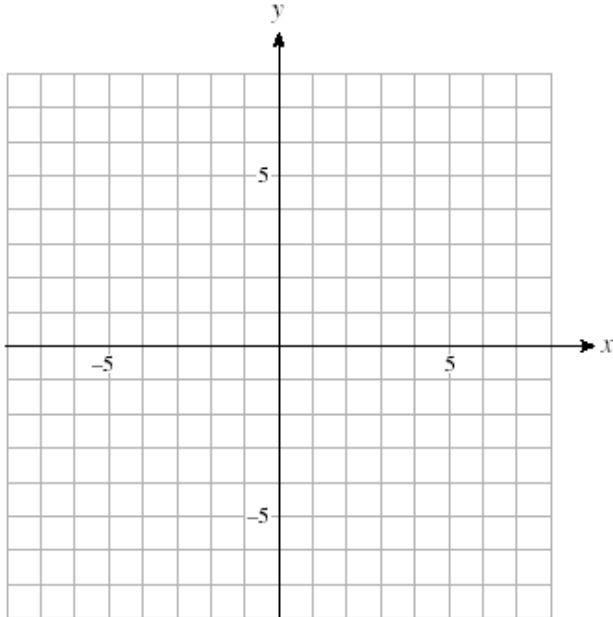
a) $y > -2x + 7$

b) $2x - 3x \leq 12$

Steps to graphing an inequality:

Ex. #3 Graph the solution set for each linear inequality.

a) $\{(x,y)|x - 3 > 0, x \in \mathbb{R}, y \in \mathbb{R}\}$

b) $\{(x,y)|-2y + 6 \leq 0, x \in \mathbb{R}, y \in \mathbb{R}\}$