

Sam has a collection of yellow and red cards. Yellow cards are worth 3 points and red cards are worth 5 points. He has at most 15 cards, totaling at least 45 points. This can be modeled by the following system.

$$y + r \leq 15$$

$$3y + 5r \geq 45$$

Graph the system. Then use the graph to determine which combination is a solution.