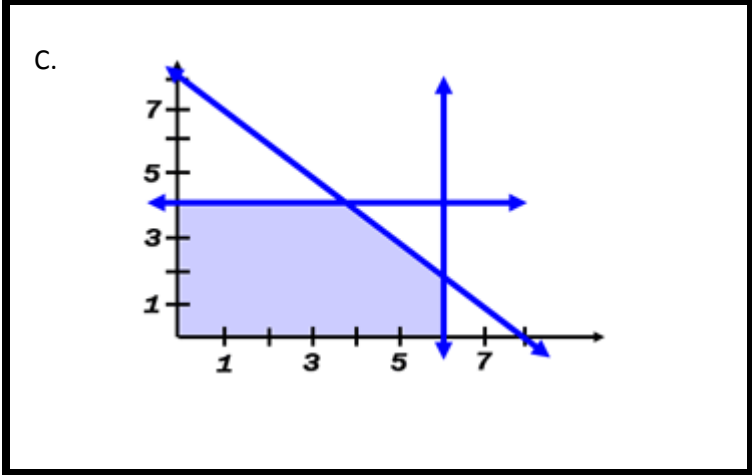
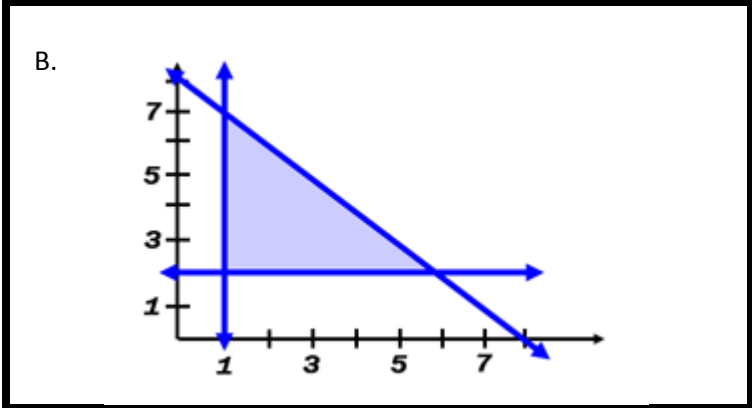
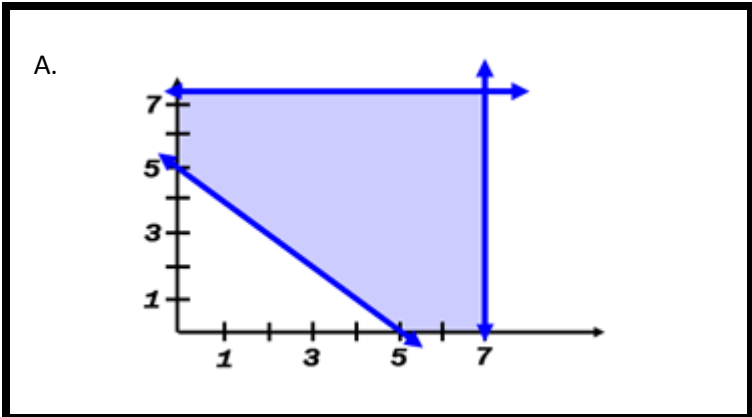


Directions 1) cut out all the rectangles, 2) match each word problems with its graph and system of inequalities, 3) secure your work with either tape or glue, and 4) get help with [MATHguide's online lesson](http://MATHguide.com) if necessary.



1.

$$\begin{cases} x + y \leq 8 \\ x \leq 6 \\ y \leq 4 \\ x \geq 0 \\ y \geq 0 \end{cases}$$

2.

$$\begin{cases} x + y \geq 5 \\ x \leq 7 \\ y \leq 7.5 \\ x \geq 0 \\ y \geq 0 \end{cases}$$

3.

$$\begin{cases} x + y \leq 8 \\ y \geq 2 \\ x \geq 1 \\ x \geq 0 \\ y \geq 0 \end{cases}$$

I.  
The number of tiki idols that can be produced must be no greater than 80. At least 20 brown tiki idols must be produced. At least 10 black idols must be produced.

II.  
The number of dresses produced cannot exceed 70. The number of shoes produced cannot exceed 75. The number of total clothing items must not be less than 50.

III.  
A car dealership cannot sell more than 80 cars/month. They cannot sell more than 60 compact cars/month. They cannot sell more than 40 sedans/month.