**Example 1:**

Change the following information into inequalities and graph them below.

Jack has to buy pop for family movie night. They need at least 3 litres of cola. They need at least 6 litres of Dr. Pooper. Jack has enough money to buy a maximum of 12 litres total.

**Step 1 - Define your variables.**

\_\_\_\_\_ = # of litres of cola.

\_\_\_\_\_ = # of litres of Dr. Pooper.

**Step 2 - Make inequalities from the paragraph.**

They need at least 3 litres of cola.

They need at least 6 litres of Dr. Pooper.

Jack has enough money to buy a maximum of 12 litres total.

**Step 3 - Graph the inequalities.**

Every point inside the triangle represents

a possible combination of cola and

Dr. Pooper that jack can buy.

**Example 2:**

Change the following into inequalities and graph them.

Buffy the farmer is going to plant corn and beans. Buffy has enough seed to plant 4 acres of corn. She has enough seed to plant 6 acres of beans. Buffy only has 8 acres of land. Hint: Buffy can't plant negative acres of corn or beans.

**Step 1 - Define your variables.**

\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Step 2 - Make inequalities from the paragraph.**

Buffy has enough seed to plant 4 acres of corn.

She has enough seed to plant 6 acres of beans

Buffy only has 8 acres of land.

Buffy can't plant negative acres of corn or beans. (2 inequalities)



**Step 3 - Graph the inequalities.**

What does the shaded area represent?