Unit 1: Functions, Inequalities, and Systems

1. A food truck sells tacos for $3 and drinks for $2. Write and graph a system of inequalities that shows all the combinations of tacos (x) and drinks (y) the truck can sell if it can serve **at most 80 customers** and has **no more than $200 worth of supplies**.

   - Which point on the graph represents the maximum possible revenue?

2. Solve the system:

$$2x + 3y = 12$$
$$x - y = 1$$

   Interpret your solution as a break-even point in a business model.