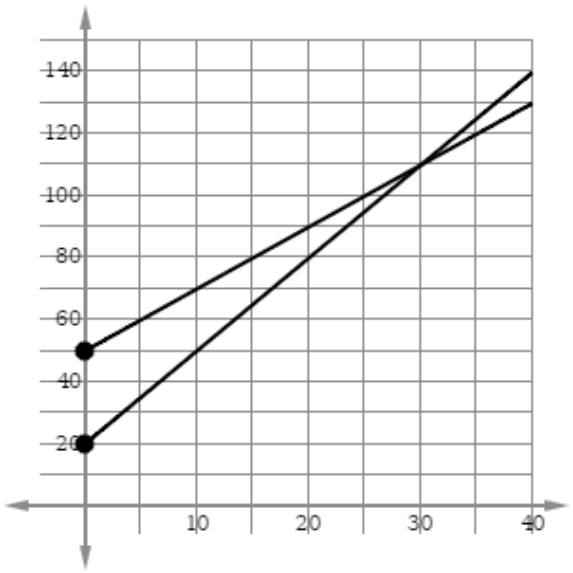
Algebra Readiness | Linear Modeling and Systems | Full Name _____

06 C – Worksheet 2 | Date _____ Period _____

1. **Albert and Bertha work at a department store. Albert has already folded 50 shirts and can fold 2 shirts per minute. Bertha has folded 20 shirts but can fold 3 shirts per minute.**

a) Label each graph as "A" for Albert or "B" for Bertha. Justify how you chose to label each graph.



b) Fill in the tables below.

Albert

time (minutes)	Number (shirts folded)
0	
10	
20	
30	
40	

Bertha

time (minutes)	Number (shirts folded)
0	
10	
20	
30	
40	

c) Write a linear equation which models the "n" number of shirts Alberta has folded after "t" minutes.

d) Write a linear equation which models the "n" number of shirts Bertha has folded after "t" minutes.

e) Interpret the graph in the context of the problem.

2. **Carlos and David are inflating soccer balls for their coach. Coach gave Carlos 40 soccer balls and an electric pump. Carlos can inflate 5 balls every 2 minutes. Coach gave David 10 soccer bulls and a manual pump. David can inflate 1 ball every 3 minutes.**

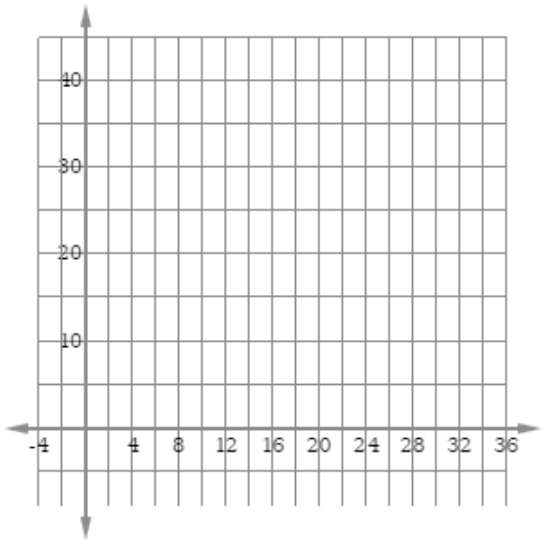
a) Fill in the tables below

Carlos

time (minutes)	Number (balls remaining)
0	40
2	
4	
6	
8	

David

time (minutes)	Number (balls remaining)
0	
3	9
6	
9	
12	



b) Graph lines for the models on the given plane.

c) Write a linear equation for Carlos which models "n" number of balls left to inflate after "t" minutes.

d) Write a linear equation for David which models "n" number of balls left to inflate after "t" minutes..

e) Interpret the graph in the context of the problem.