Name:

These graphs are models to find the EARLIEST TIME any particular job can START. What do you think is meant in a team by the following statement? You are only as fast as your slowest link.

1. Label the provided graph (using the appropriate vertices and weighted edges).

Task	Time	Prerequisites	
Start	0		
А	5	None	
В	6	Α	
С	4	А	
D	4	В	
Е	8	B,C	
F	4	С	
G	10	D,E,F	
Finish			1

- a. What is the earliest time this entire graph can be completed?
- b. Two tasks must be completed before "E" can start. Which task gets to "E" first and how long does that task have to wait on the other task?
- 2. Create a graph and label it appropriately.

Task	Time	Prerequisites	
Start	0		
А	1	None	
В	2	None	
С	3	A, B	
D	5	В	
Е	5	С	
F	5	C, D	
G	4	D,E	
Н	4	E, F	
Finish			

3. Create a graph and label it appropriately.

Task	Time	Prerequisites
Start	0	
А	3	None
В	2	None
С	2	А
D	3	В
Е	4	В
F	1	C, D, E
G	3	D
Н	1	F,G
Ι	3	F
Finish		

What is the earliest time this entire graph can be completed?

4. Fill in and graph: What is the least amount of time needed to prepare dinner?

Task	Time (min)	Prerequisite Task
Start	0	None
A Wash hands	1	None
B Defrost hamburger	120	А
C Shape meat into patties	15	В
D Cook hamburgers	14	С
E Peel and slice potatoes	15	А
F Fry potatoes	40	Е
G Make salad	15	А
H Set table	5	A
I Serve food	8	D,F,G,H