BCP / AN	ИDG
Discrete	Math

Name:	
Period	

## <u>Assignment</u>

Using Graph Theory to Model Systems

Suppose you were hired by Turner Construction Company as a supervisor. Your first job was an assignment to finish building a 4 story apartment complex. You were given the task table shown below, but the actual tasks were not listed because the original table had been lost in a fire. Since you are an expert, you can figure out what the original supervisor meant just by each letter

Task	Time (weeks)	Prerequisites
Start	0	n/a
A	2	None
В	4	A
С	4	A, B
D	3	В
Е	5	C
F	2	B, C
G	3	D
Н	5	D, E, F
I	3	G, H
Finish	????	A through I

## **Procedural Tasks**

• In the space below, draw a graph that represents the information in the table so that you can discuss with your boss how long the job will take.

## Interpretation/Analysis

• How long will it take to completely finish this job? Justify your answer.

• After double-checking for accuracy, you realize that another prerequisite for G is E. Does this change the overall time needed to completely finish the job? Explain.