

HW5

Activity list for the Reliable Construction Co. Project

Activity	Activity Description	Immediate Predecessors	optimistic time	most likely time	pessimistic time
<i>A</i>	Excavate	—	1	2	3
<i>B</i>	Lay the foundation	<i>A</i>	2	3,5	8
<i>C</i>	Put up the rough wall	<i>B</i>	6	9	18
<i>D</i>	Put up the roof	<i>C</i>	4	5,5	10
<i>E</i>	Install the exterior plumbing	<i>C</i>	1	4,5	5
<i>F</i>	Install the interior plumbing	<i>E</i>	4	4	10
<i>G</i>	Put up the exterior siding	<i>D</i>	5	6,5	11
<i>H</i>	Do the exterior painting	<i>E, G</i>	5	8	17
<i>I</i>	Do the electrical work	<i>C</i>	3	7,5	9
<i>J</i>	Put up the wallboard	<i>F, I</i>	3	9	9
<i>K</i>	Install the flooring	<i>J</i>	4	4	4
<i>L</i>	Do the interior painting	<i>J</i>	1	5,5	7
<i>M</i>	Install the exterior fixtures	<i>H</i>	1	2	3
<i>N</i>	Install the interior fixtures	<i>K, L</i>	5	5,5	9

- draw the network diagram
- find the minimum completion time of project by using the expected times of activities
- find the variance of the project
- find critical path activities
- what is the probability to complete the project in 35 weeks?