

Cases on Project Management

Case Study 10 Salem Daughters Construction

Salem Daughters Construction Company has contracted with a Mr. Hawthorne to build a classic house having seven gables. The customer wants to complete the house as soon as possible.

Activity	Immediately Preceding Activity	Expected Completion Time
a Grade	-	3
b Excavate	-	4
c Basement	b	1
d Foundation	a, c	2
e Floor joists	d	3
f Exterior plumbing	a, c	3
g Floor	e, f	2
h Power on	d	1
i Walls	g	10
j Wire	h, i	2
k Com lines	j	1
l Inside plumbing	i	5
m Windows	l	2
n Doors	l	2
o Sheetrock	k, l	3
P Interior trim	n, o	5
q Exterior trim	n	4
r Paint	m, p, q	3
s Carpet	r	1
t Buyer inspection	s	1

1. Construct a CPM network for the project, entering the expected activity completion times alongside the applicable arrows.
2. For each event, find the earliest possible, latest allowable, and slack times. Then, establish the critical path. How long is the project expected to take?