

Project Planning & Control

Lesson 3 *PDM – Problem #1*

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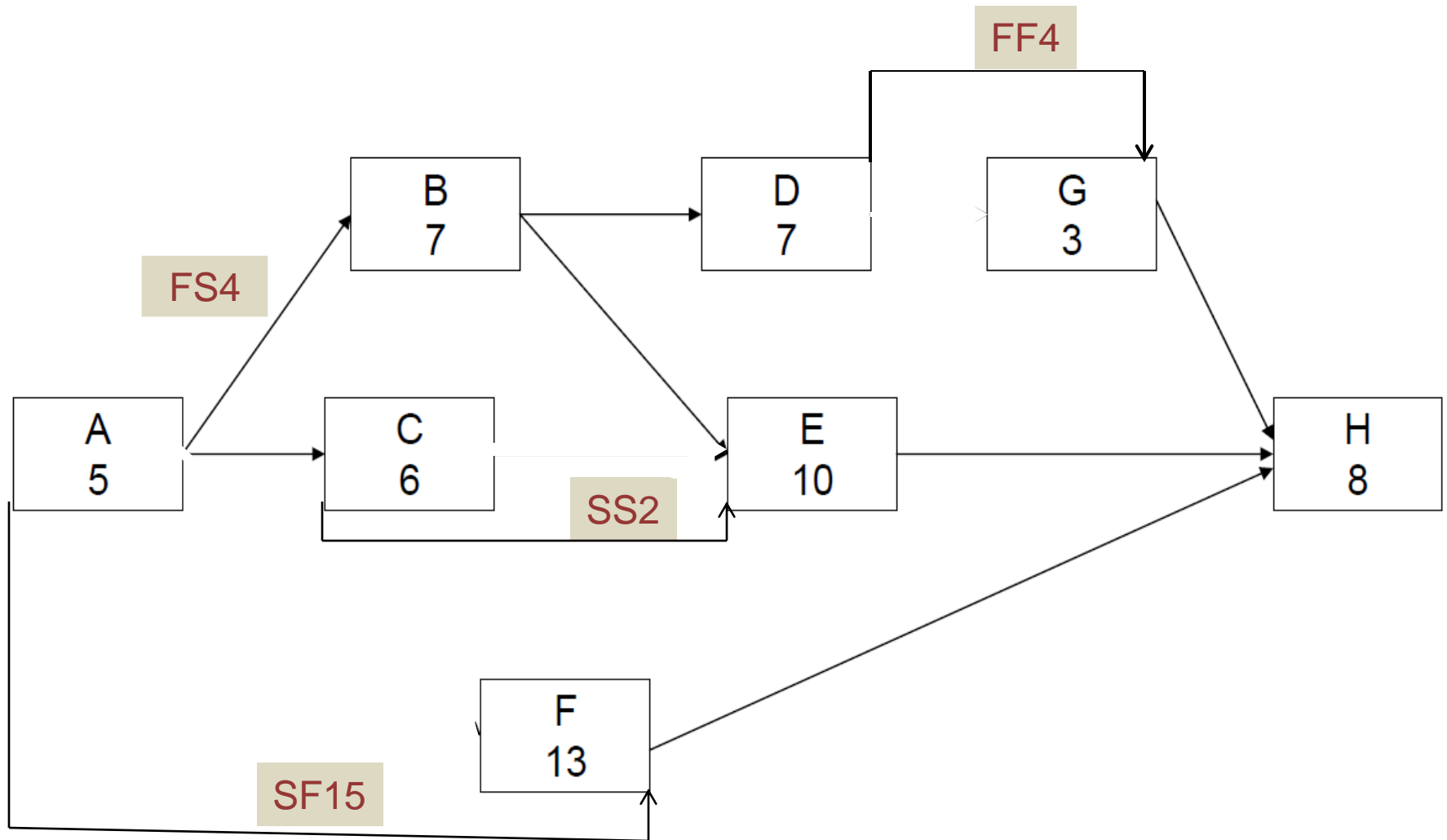


PDM – Problem #1

Activity	Predecessor	Duration
A	-	5
B	A (FS +4)	7
C	A	6
D	B	7
E	C (SS +2), B	10
F	A (SF+15)	13
G	D (FF+4)	3
H	E,F,G	8

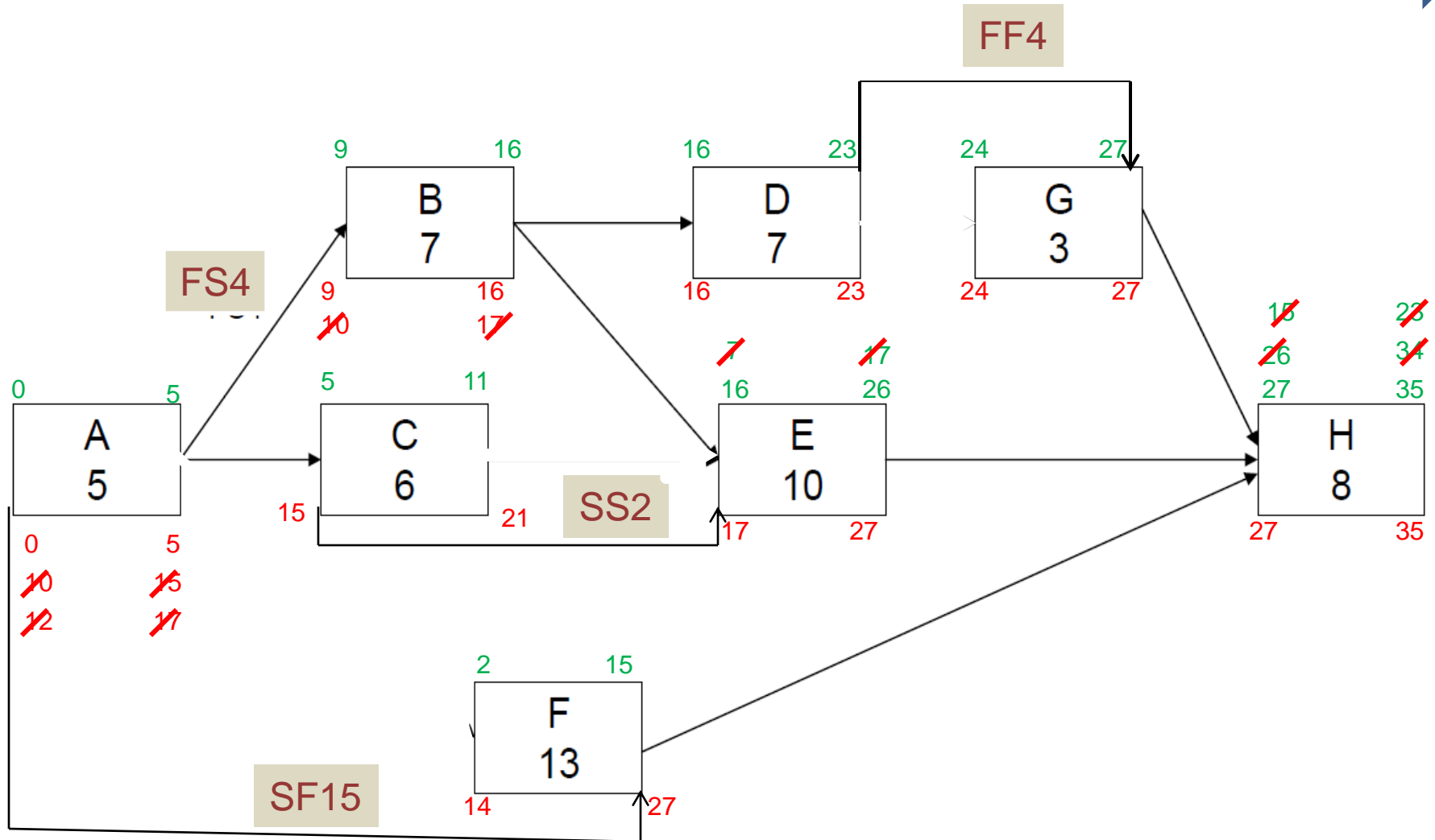
Draw PDM Network & Find ES, EF, LS, LF & CRITICAL PATH

Problem 1: PDM Representation



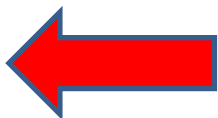
Problem #1 Network Analysis

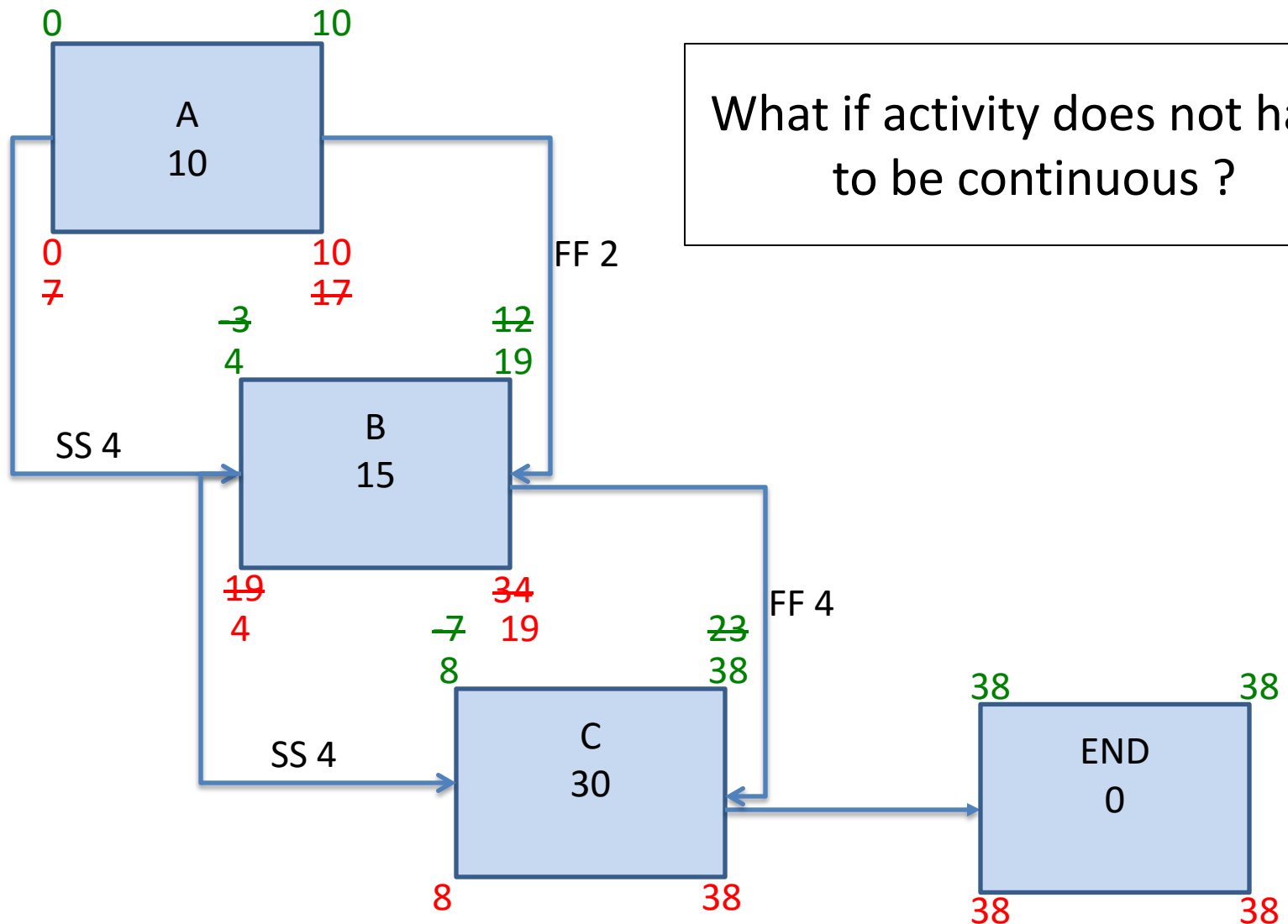
FORWARD PASS



CRITICAL ACTIVITIES A-B-D-G-H

BACKWARD PASS





What if activity does not have to be continuous ?

Comparison between AON and PDM

AON

- Allows only one kind of logical relationship between activities.
- The preceding activity must be completed before any succeeding activity can begin (lag = 0).
- Can not create complex schedule.
- Easy to interpret

PDM

- Allows four kind of logical relationship between activities (FS, SS, SF, FF).
- The preceding activity can have lag (zero, +ve, -ve) between succeeding activity.
- Can be used as flexible scheduling tool.
- Not easy to interpret

PDM – Problem #2

Activity	Predecessor	Duration
Start	-	0
A	Start	7
B	Start	5
C	A (SS +3)	11
D	Start	10
E	B	09
F	A (FS -1)	5
G	A,D	8
H	C	8
I	F H (FF -2)	4
J	E (FS +2) G (FF +3)	12
K	E	3
End	I,J,K	0

Draw PDM
Network & Find
ES, EF, LS, LF &
CRITICAL PATH