Critical path analysis 8E

1

Activity	Total float
A	0
B	$10-3-0=7$
C	$15-8-6=1$
D	0
E	$14-4-3=7$
F	$20-5-14=1$
G	0
H	$22-8-7=7$
I	$28-8-19=1$
J	$22-2-19=1$
K	$29-1-27=1$
L	0

2 a $a=10$ $b=19$ $x=19-10=9$

Total float at $Q=3=15-y-a$

$y=15-3-10$

$y=2$

b Minimum value of $c=10+2=12$

c Maximum value of total float of $R=19-4-12$

$=3$

3 a The value of y is an early event time and calculated starting from 0 at the source node and working towards the sink node.

$y=6+4$

$=10$

The late event times are calculated starting from the sink node and working backwards towards the source node.

$x=21-3-3-12$

$=3$

$z=21-4$

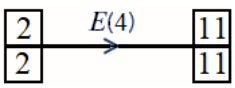
$=17$

b The critical path is $A-D-I-L$.

(A-D-H-K is not a critical path as the activity H has an early event time of 3 and a late event time of $z=17$. Critical activities have to have early and event times equal.)

The critical activities are A, D, I and L.

c



Total float $=11-4-2=5$