

If D is reduced by half to 4 days then,

The earliest expected time, critical path and slack time will changed.

Here,

Task A:

ES=0,

Task time=3,

EF=3,

LS=0 and LF=3.

Task B:

ES=3,

Task time=4,

EF=7,

LS=3 and LF=7.

Task C:

ES=3,

Task time=3,

EF=6,

LS=5 and LF=8.

Task D:

ES=7,

Task time=4,

EF=11,

LS=7 and LF=11.

Task E:

ES=6,

Task time=3,

EF=9,

LS=8 and LF=11.

Task F:

ES=11,

Task time=9,

EF=20,

LS=11 and LF=20.

Now,

Then the critical path A-B-D-F and slack time C-E. The project duration 20 weeks instead of 25 weeks.