

Critical Path Analysis: Cooking Bolognese Answer Sheet

Question 1

N/A

Question 2

Fill out the activity and duration columns below so that they match the ones on the slide.

- See table below

Question 3

How are the activities linked together? Fill out the depends on column to show each task's dependencies.

Activity	Label	Duration (minutes)	Depends on
Boil water	A	5	-
Add pasta to water and cook	B	10	A
Chop up vegetables	C	7	-
Cook mince/quorn	D	30	-
Add vegetables and tomato puree to mince/quorn and stir	E	3	C, D
Drain pasta	F	2	B
Mix Bolognese and pasta together and serve	G	2	E, F

Question 4

Use your precedence table to add arrows to the critical path diagram, showing which activities link to which event.

- See diagram below

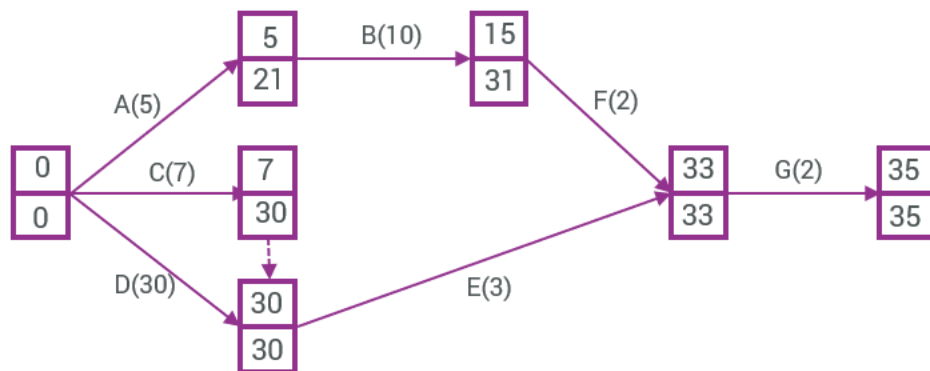
Question 5

Calculate the earliest start time of each node and write it on the diagram.

- See diagram below

Question 6

Calculate the latest finish time of each node and write it on the diagram.



Question 7

What is the critical path for cooking Bolognese?

- The critical path is D-E-G. The shortest time the meal can be cooked in is 35 minutes.

Question 8

What time will you arrive at the cinema? Which film will you see with your friends?

- If we start cooking at 7pm the earliest we could get to the cinema for is 8:50pm, for the 9pm film.