

## Critical Path Analysis: Cooking Bolognese Student Worksheet

You would like to cook spaghetti Bolognese for dinner tonight but your friends would also like to go to the cinema with you. You need to find out the quickest time it takes to cook spaghetti Bolognese, so that you can tell your friends what the earliest film showing you can go and see is. Have you got enough time to do both?

### Useful Information

- You start cooking at exactly 7pm.
- The possible film times available are:
- 7:30pm, 8:00pm, 8:40pm, 9:00pm, 9:20pm or 9:50pm
- It will take you a total of 1 hour to eat, wash up after.
- It will take you 15 minutes to walk to the cinema.

### Question 1

Put the recipe cards in order to create a timeline. Make a note of your timeline in the space below.

### Question 2

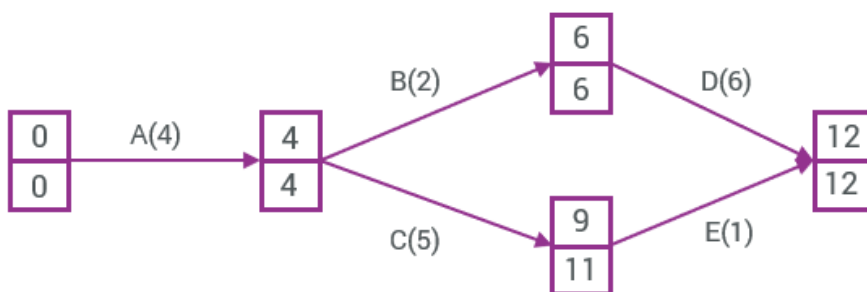
Fill out the activity and duration columns below so that they match the ones on the slide.

Label	Activity	Duration	Depends on
A			
B			
C			
D			
E			
F			
G			

### Question 3

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

Use the key below to help you with the following questions.



Key:



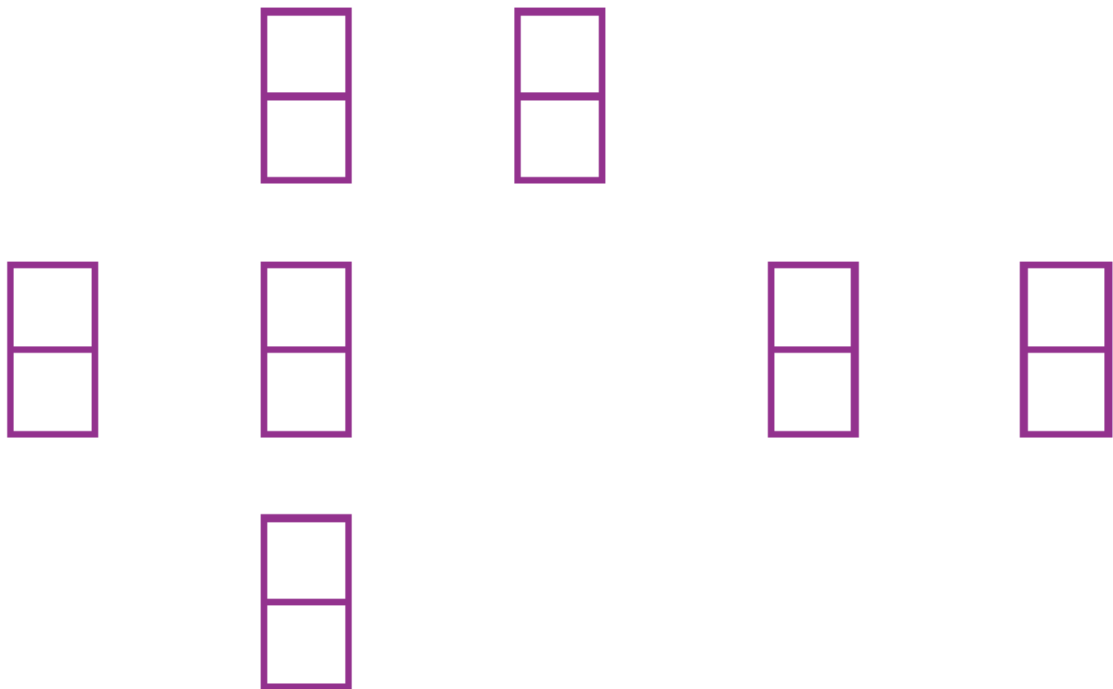
Activity (duration)

Earliest start time  
Latest finish time

#### Question 4

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

Tip: you might find it easier to fill out the diagram with pencil than with pen!



#### Question 5

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

#### 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?

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#### Question 8

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

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