

National 5 Applications of Maths

Task Planning: Past exam questions



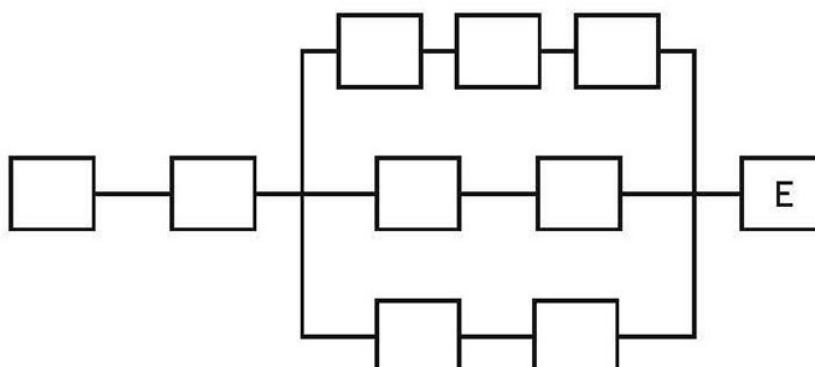
1) SQA 2019 Paper 2 Question 5b

A publishing company produced the following table to show all the tasks involved in publishing a book.

Activity	Description	Preceding task
A	Illustrate cover	H
B	Write 1st draft	C
C	Research ideas	None
D	Edit book	B
E	Publish book	A,J,G
F	Re-work	D
G	Proof read	F
H	Choose title	B
I	Copyright	B
J	ISBN	I

Complete the diagram below to show the tasks.

2



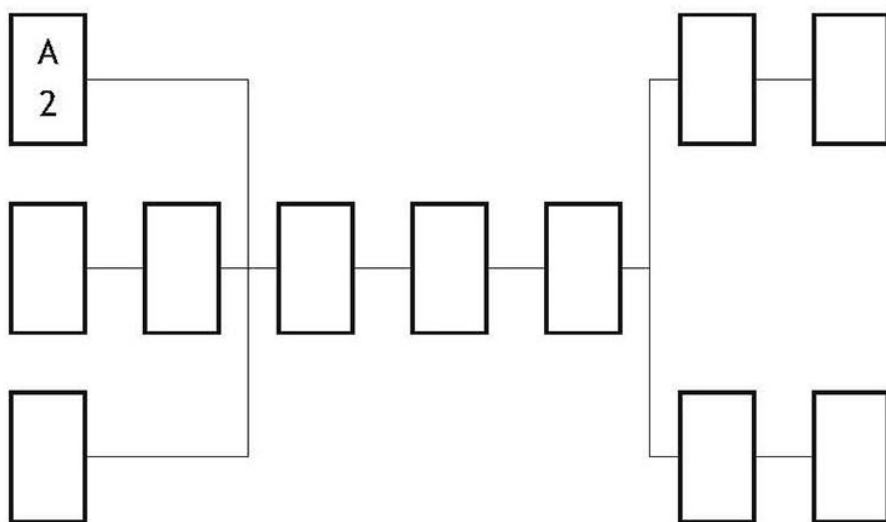
2) SQA SQP Paper 1 Question 13

Fence Direct is a company who provides a team of workers to build a fence.

The table shows the list of tasks and the time taken to complete them.

Task	Detail	Preceding Task	Time (hours)
A	Take down old fence	None	2
B	Measure length of fence needed	None	0.5
C	Mark on the ground where new posts must go	None	0.5
D	Collect materials and tools from yard	B	1
E	Hammer posts into the ground	A, C, D	4
F	Attach metal fencing to posts	E	2
G	Attach barbed wire to top of posts	F	1
H	Gather up rubbish	G	2
I	Gather up tools	G	0.5
J	Take rubbish to recycling centre	H	1
K	Put tools back in yard	I	0.5

- (a) Complete the diagram below by writing these tasks and times in the boxes. 2



- (b) Fence Direct claims that all of these tasks can be completed in 10 hours.
Is this a valid claim?

Use your working to justify your answer.

2

3) SQA 2018 Paper 2 Question 9ab

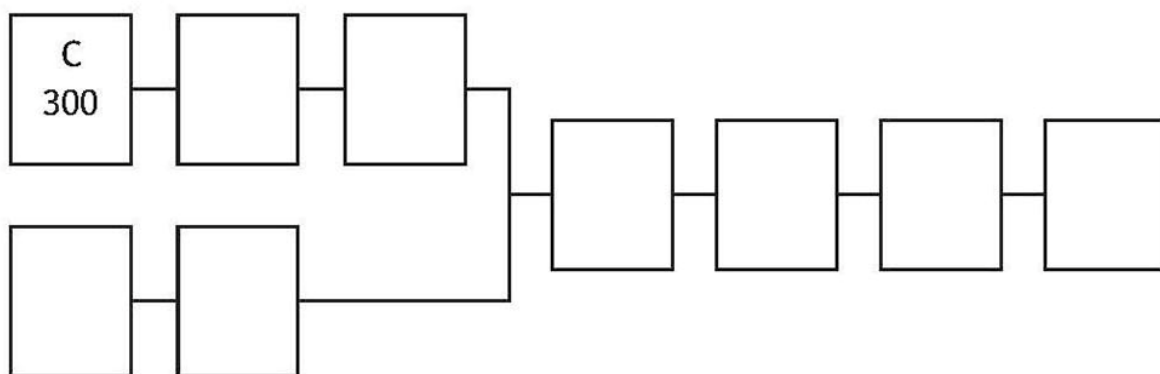
A factory produces cans of tinned beans.

The table shows the list of tasks and the time taken to complete them.

Task	Detail	Preceding task	Time (seconds)
A	Boil beans to cook them	C	500
B	Put on lid	H,E	3
C	Blanch dried beans in water	None	300
D	Attach label	I	5
E	Put sauce in tin	F	2
F	Make the sauce	None	900
G	Put in box	D	5
H	Put beans in tin	A	2
I	Cook beans in sauce in tin	B	300

(a) Complete the diagram below to show the tasks and times in the boxes.

1



The factory manager thinks that the whole process can be completed in less than 25 minutes.

(b) Based on the times given, is the factory manager correct?

Use your working to justify your answer.

2

4) SQA 2014 Paper 1 Question 6

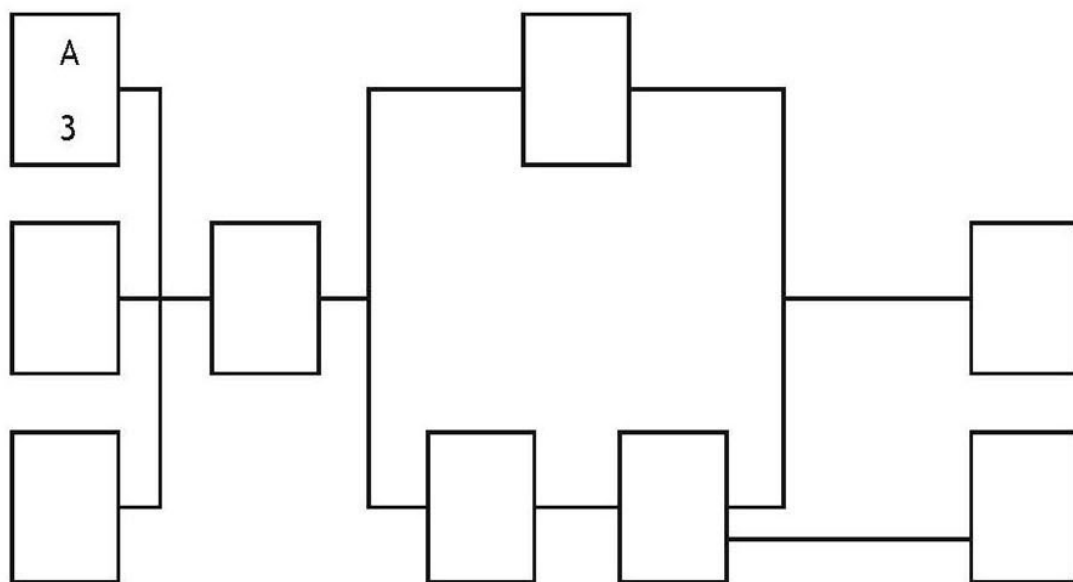
A family employ a company called Kitease to install a new kitchen for them.

Kitease provide a team of workers to install the kitchen.

The table shows the list of tasks and the time required for each.

Task	Detail	Preceding task	Time(hours)
A	Begin electrics	None	3
B	Build cupboards	None	5
C	Begin plumbing	None	2
D	Plaster walls	A,B,C	8
E	Fit wall cupboards	D	6
F	Fit floor cupboards	D	5
G	Fit worktops	F	3
H	Finish plumbing	G	3
I	Finish electrics	E,G	4

- (a) Complete the diagram below by writing these tasks and times in the boxes.



2

- (b) Kitease claim they can install this kitchen in 22 hours.

Is this a valid claim?

Give a reason for your answer.

2

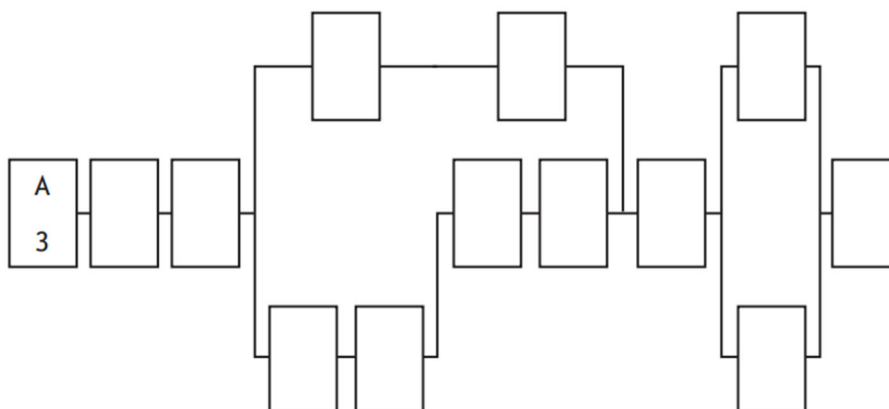
5) SQA 2021 Paper 1 Question 10

Sarah wants to make chilli con carne.

The table shows the list of tasks and the time taken for Sarah to complete them.

Activity	Description	Preceding task	Time (minutes)
A	assemble ingredients	none	3
B	chop onions	A	5
C	heat pan with oil	B	2
D	fry onions in pan	C	6
E	add mince to pan and stir	D	5
F	open cans of kidney beans and tomatoes	C	2
G	drain kidney beans	F	1
H	measure water into jug	G	1
I	add spice mix to water	H	2
J	add spice mix and water to pan	E,I	2
K	add kidney beans and tomatoes and simmer	J	35
L	microwave rice	J	3
M	serve	K,L	2

- (a) Complete the diagram below to show the tasks and times in the boxes. 2



- (b) Sarah claims she can make this chilli con carne in 55 minutes.

Based on the times given, determine if she is correct.

2

6) SQA 2016 Paper 1 Question 5

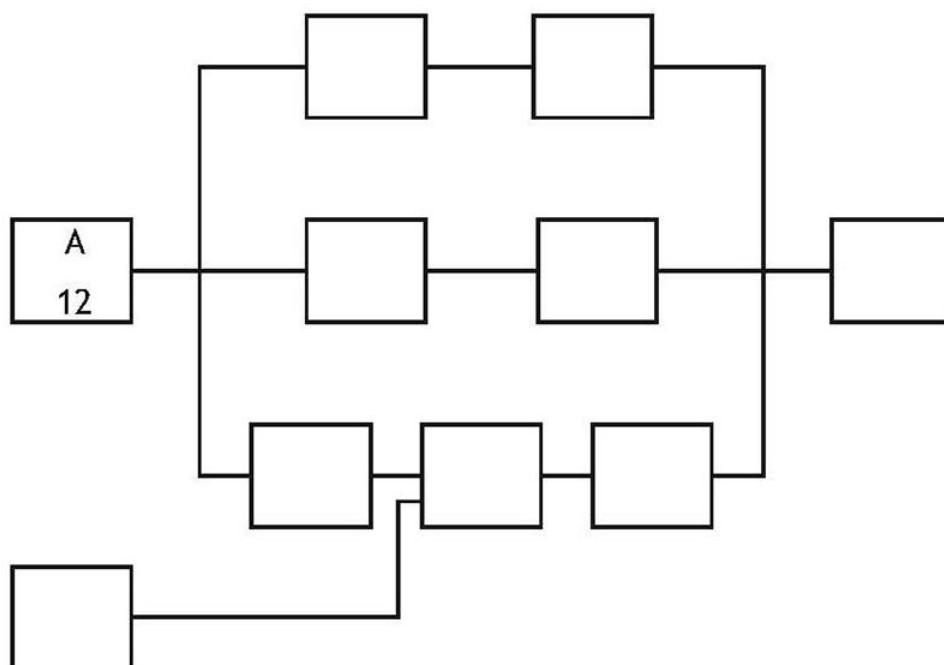
A computer company is researching how long it would take to develop a new games console and bring it to market.

The following table of necessary tasks was produced.

Activity	Description	Preceding Task	Time (months)
A	Product design	None	12
B	Market research	None	2
C	Production analysis	A	3
D	Product model	A	4
E	Sales brochure	A	1
F	Product testing	D	5
G	Cost analysis	C	3
H	Sales training	B,E	2
I	Pricing	H	1
J	Project report	F,G,I	1

(a) Complete the diagram below to show the tasks and times in the boxes.

2



(b) The company want this entire process to be completed in 2 years.
Based on the times given, is this possible?
Show working to justify your answer.

2