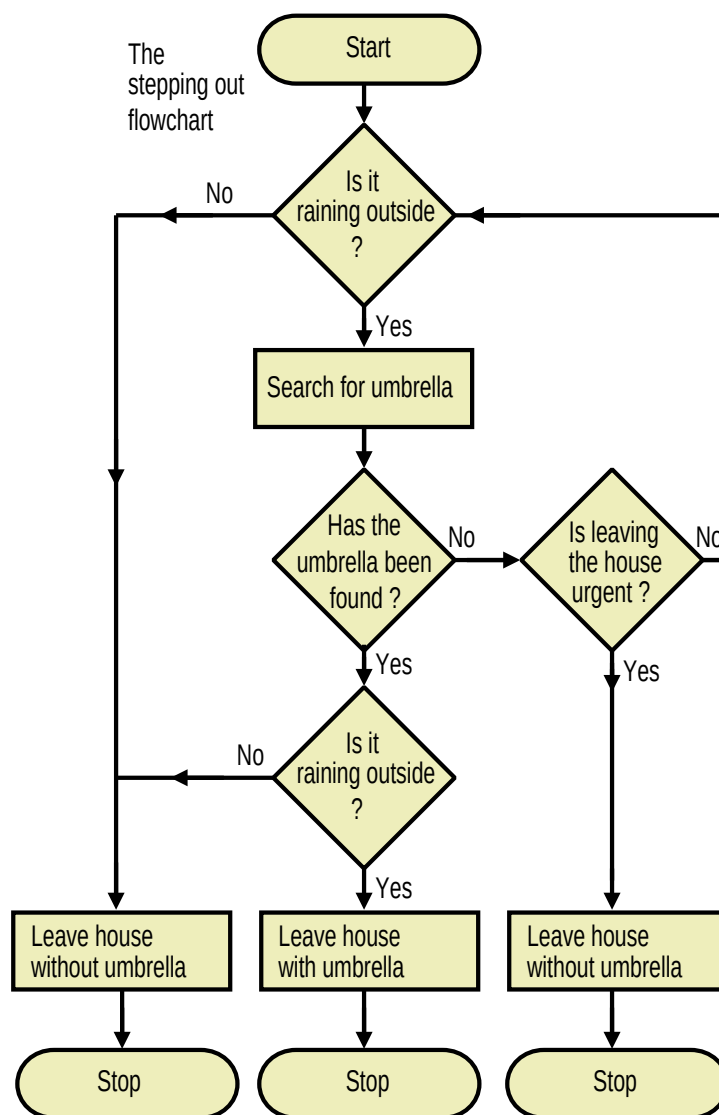


2.4 Answers

GCSE Mathematics Iteration

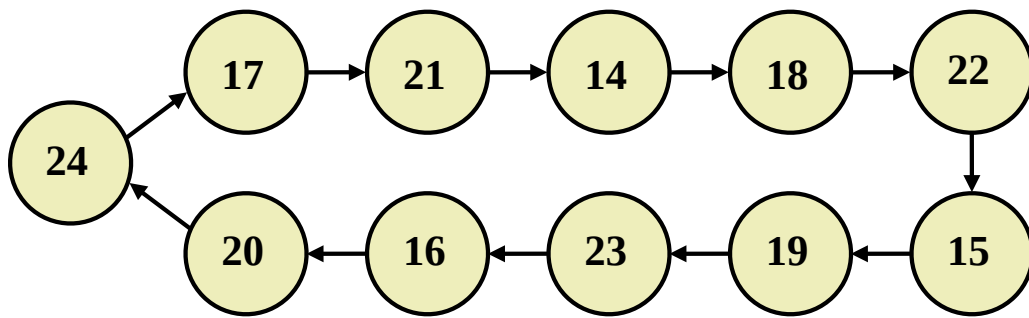
2.4.1 Solution to 2.1 Discussion

- (i) If the umbrella cannot be found the searcher cannot leave the house until it stops raining. They are “stuck in a loop”. [1 mark]
- (ii) YES - It is possible to leave the house when it is not raining but with the umbrella. This would happen if it was raining but then stopped whilst searching for the umbrella, the umbrella then being found. [2 marks]
- (iii) A more complicated flowchart could be devised to prevent the situations in parts (i) and (ii) arising by adding more decision diamonds (but you may feel that leaving the house with an umbrella when it's only just stopped raining is a wanted result anyway).



[2 marks]

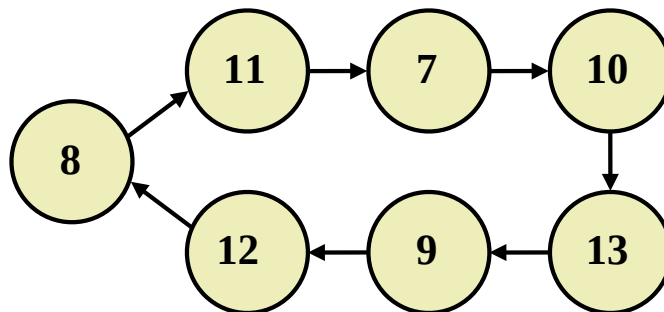
2.4.2 Solution to 2.2 Example



[6 marks]

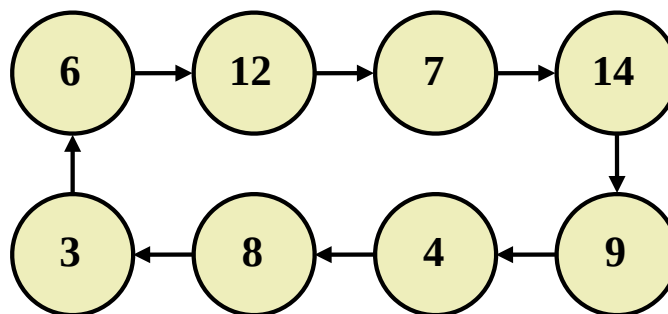
2.4.3 Solution to 2.3 Exercise

Answer 1



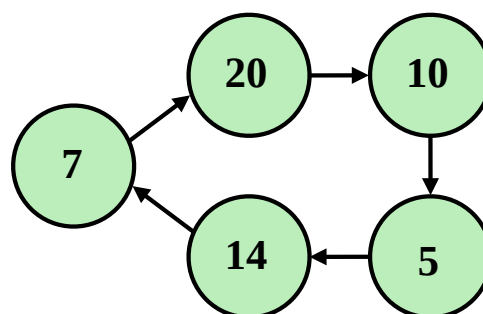
[6 marks]

Answer 2



[6 marks]

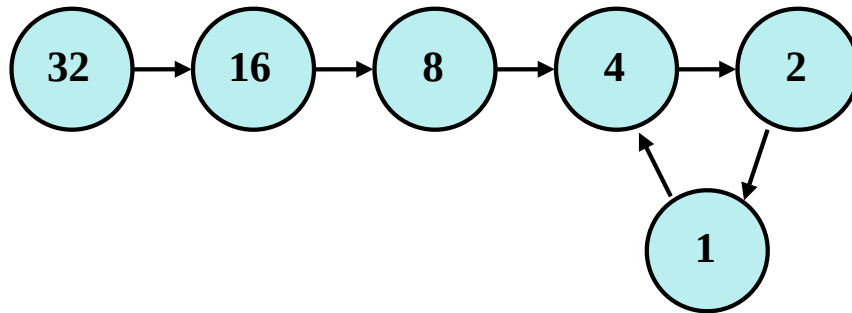
Answer 3



[6 marks]

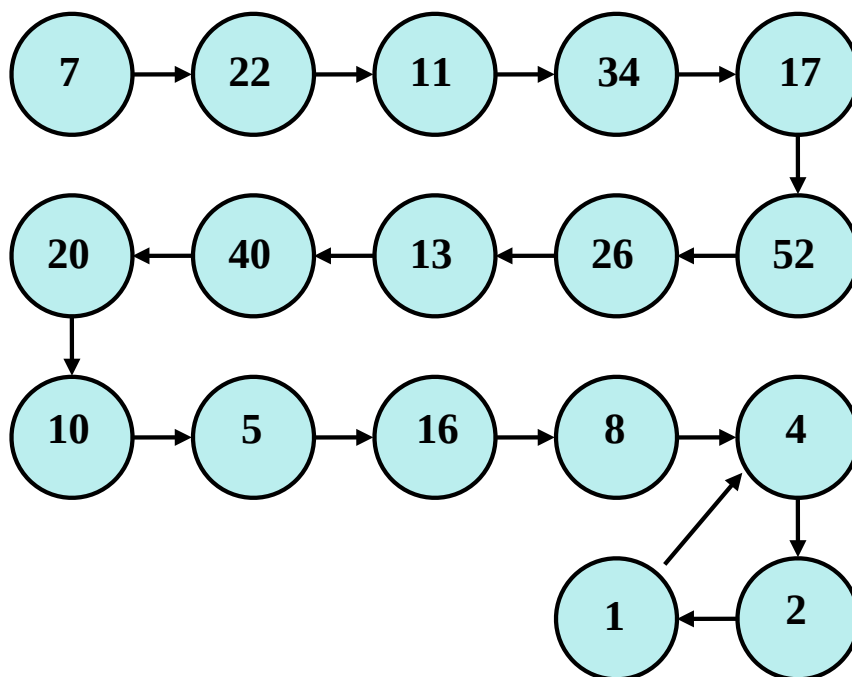
Answer 4

(i)



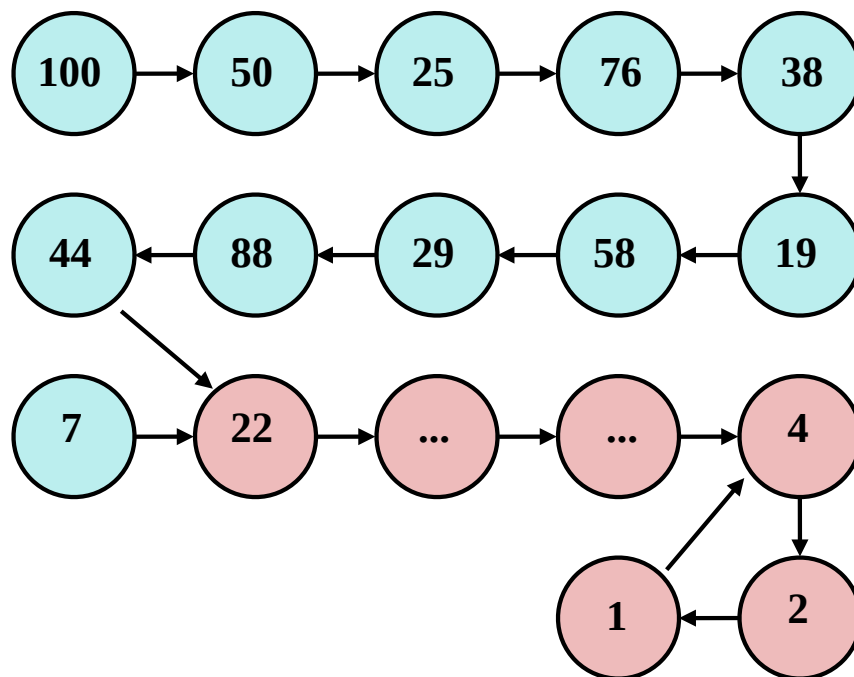
[4 marks]

(ii)



[8 marks]

(iii)



[8 marks]

(iv) Watch video !

[2 marks]