4 **(a)** Tickets for a theme park are booked online. An adult ticket costs $12.99 and a child ticket costs $7.99. A booking fee of $1.99 is added to the total cost of each booking.

Write an algorithm in pseudocode to:

- input the number of adult tickets for a booking
- input the number of child tickets for a booking
- calculate and output the total cost of the booking using an appropriate message.

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..... [4]

(b) Each booking must have at least one adult ticket.

Explain how the algorithm could be changed to repeatedly ask for the number of adult tickets if the number input is less than 1.

Any code used must be fully explained.

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..... [4]

(c) The theme park has rules for a person to be able to go on a ride.

A person can go on a ride (**X** = 1) only if they:

- are 1.4 metres tall or over
- are 12 years old or over
- do **not** have a medical condition.

Input	Description	Binary value
A	under 1.4 metres	0
	1.4 metres or over	1
B	under 12 years old	0
	12 years old or over	1
C	does **not** have a medical condition	0
	has a medical condition	1

(i) Write the logic expression for this problem.

X = ... [2]

(ii) Complete the truth table for this problem.

A	B	C	Working space	X
0	0	0		
0	0	1		
0	1	0		
0	1	1		
1	0	0		
1	0	1		
1	1	0		
1	1	1		

[4]