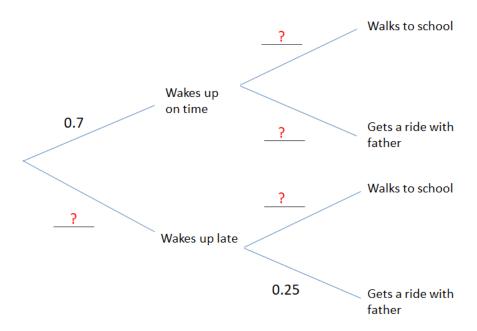
**Topic 4: Statistics and Probability** 

1. If Amanda gets up on time, the probability that she walks to school is 0.90. If Amanda gets up late, there is a 0.25 probability that she gets a ride with her father. The tree diagram below represents the probabilities of these scenarios. Amanda wakes up on time at a probability of 0.7.



(a) Complete the tree diagram

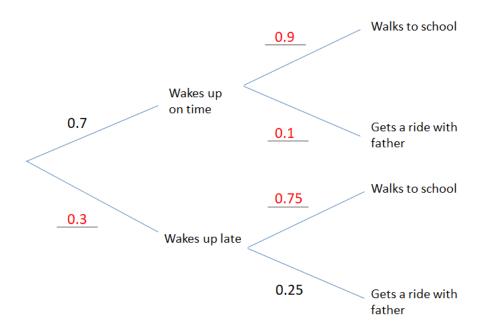
(3 marks)

(b) Find the probability she walks to school

(3 marks)

Mark scheme:

(a)



(A1)(A1)(A1) for each correct pair

(b) 
$$(0.7)(0.9) + (0.3)(0.75)$$
 (A1)(M1)  
= 0.855 (A1)