5 (a) Show that $\log_4 32 = \frac{5}{2}$

(2)

(b) Hence, or otherwise, find the exact solutions of the equation

$$\log_2 x - \log_4 32 + \frac{1}{4}\log_x 16 = 0$$

(7)

Question 5 continued

(Total for Question 5 is 9 marks)