Answer ALL ELEVEN questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

1   The functions f and g are defined as

$$f(x) = 3^x$$

$$g(x) = \frac{15}{2x - 3}$$

(a) Write down the value of x for which $f(x) = 81$

(1)

(b) Write down the value of x that must be excluded from any domain of g

(1)

(c) Find fg(4)

(2)

Question 1 continued

(Total for Question 1 is 4 marks)