1 x and y are integers such that

$$3 < x < 8$$
$$4 < y < 10$$
and $x + y = 14$

Find all the possible values of x.

....

(Total for Question 1 is 2 marks)

2 Write $\dfrac{(6x^5y^3)^2}{3x^2y^7 \times 4xy^{-3}}$ in the form ax^by^c where a, b and c are integers.

....

(Total for Question 2 is 3 marks)

3 (a) Write $\dfrac{1}{16}$ in the form 4^n where n is an integer.

....

(1)

(b) Work out the value of $8^{\frac{5}{3}} - 9^{\frac{3}{2}}$

....

(3)

(Total for Question 3 is 4 marks)