4. $f(x) = px^3 - 7x^2 - x + q$

where p and q are constants.

Given that $(2x + 1)$ is a factor of $f(x)$

(a) show that

$$8q - p = 10$$

(2)

Given that $(x - 1)$ is also a factor of $f(x)$

(b) find the value of p and the value of q.

(2)