24
$$\mathbf{p} = \begin{pmatrix} 2 \\ 3 - 2x \end{pmatrix} \qquad \mathbf{q} = \begin{pmatrix} -3 \\ 1 \end{pmatrix}$$

The vectors **p** and **q** are such that $|\mathbf{p}| = |\mathbf{p} - 2\mathbf{q}|$

Find the value of x.
Show clear algebraic working.

$x =$ ....

(Total for Question 24 is 4 marks)