

DO NOT WRITE IN THIS AREA

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24

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

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

Find the value of x .

Show clear algebraic working.

$x = \dots$

(Total for Question 24 is 4 marks)



P 6 6 2 9 3 A 0 1 9 2 8