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20 The equation of a curve C is $y = x^2 + \frac{16}{x}$

(a) Find $\frac{dy}{dx}$

.....
(2)

(b) Hence find the x coordinate of the stationary point on C .

$x =$
(2)

(Total for Question 20 is 4 marks)

21 Given that $\mathbf{a} = \begin{pmatrix} 2 \\ y \end{pmatrix}$ and $\mathbf{b} = \begin{pmatrix} -2 \\ 3 \end{pmatrix}$ and that $3\mathbf{a} - x\mathbf{b} = \begin{pmatrix} 14 \\ -27 \end{pmatrix}$

find the value of x and the value of y .

$x =$

$y =$

(Total for Question 21 is 4 marks)



P 4 8 4 7 5 A 0 1 5 2 4