

DO NOT WRITE IN THIS AREA

15 $\mathcal{E} = \{\text{positive multiples of 3 less than 50}\}$

$$A = \{x : x \geq 3\}$$

$$B = \{x : 0 < x < 18\}$$

(a) List the members of the set $A \cap B$

.....
(1)

$C = \{\text{positive even multiples of three}\}$

(b) Find $n([A \cap B] \cap C')$

.....
(3)

(Total for Question 15 is 4 marks)

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16

$$A = \begin{pmatrix} 1 & -3 \\ -4 & 2 \end{pmatrix} \quad B = \begin{pmatrix} 3 & 4 \\ -2 & -5 \end{pmatrix}$$

(a) Find $3A - 4B$

$$\begin{pmatrix} & \\ & \end{pmatrix}$$

(2)

$$C = \begin{pmatrix} 1 & 4 & 6 \\ 2 & 1 & -2 \end{pmatrix}$$

(b) Find AC

$$\begin{pmatrix} & \\ & \end{pmatrix}$$

(2)

(Total for Question 16 is 4 marks)

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