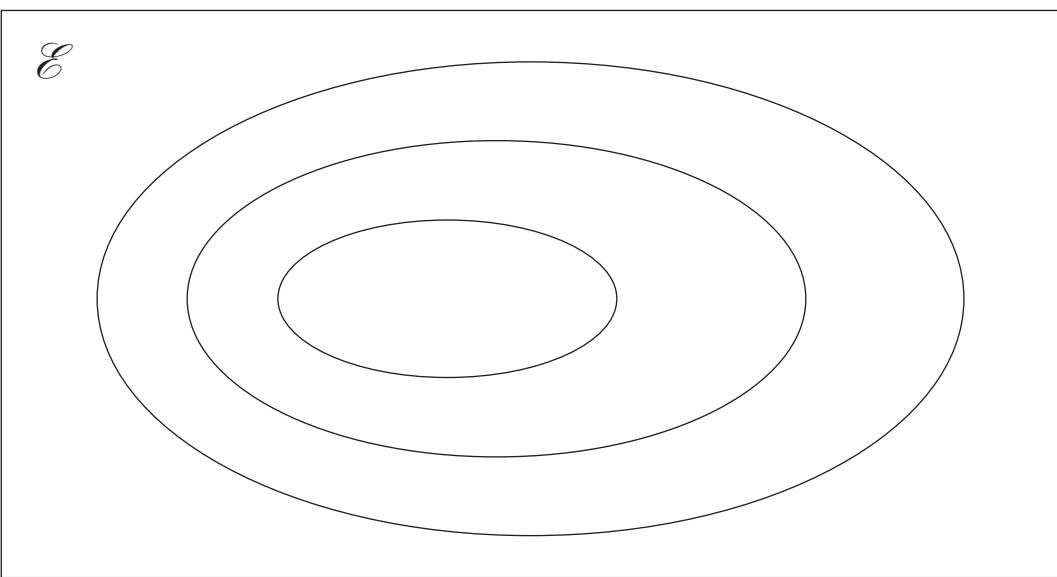


11

$$\mathcal{C} = \{\text{all numbers}\}$$

$$N = \{\text{natural numbers}\}$$

$$Q = \{\text{rational numbers}\}$$

$$Z = \{\text{integers}\}$$

- (a) On the Venn diagram, label the set N , the set Q and the set Z .

(1)

- (b) On the Venn diagram, show the four elements

$$4, \quad \sqrt{2}, \quad -3, \quad \frac{2}{3}$$

(2)

(Total for Question 11 is 3 marks)

12 $\mathbf{A} = \begin{pmatrix} 2 & 1 & 0 \\ 1 & 3 & -1 \\ -2 & 0 & 1 \end{pmatrix} \quad \mathbf{B} = \begin{pmatrix} 3 & 4 \\ 4 & 1 \\ 2 & -2 \end{pmatrix}$

Calculate the matrix product \mathbf{AB} .

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(Total for Question 12 is 3 marks)

