

Β ΛΥΚΕΙΟΥ ΘΕΤΙΚΟΣ ΠΡΟΣΑΝΑΤΟΛΙΣΜΟΣ

11.3 1)

$$\begin{aligned} d(A, \varepsilon_1) = d(A, \varepsilon_2) &\Rightarrow \frac{|2\mu - 3 + 2 \cdot (\mu + 1) - 1|}{\sqrt{1^2 + 2^2}} = \frac{|2(2\mu - 3) + \mu + 1 + 2|}{\sqrt{2^2 + 1^2}} \Rightarrow \frac{|4\mu - 2|}{\cancel{\sqrt{5}}} = \frac{|5\mu - 3|}{\cancel{\sqrt{5}}} \Rightarrow \\ &\Rightarrow |4\mu - 2| = |5\mu - 3| \Rightarrow \begin{cases} 4\mu - 2 = 5\mu - 3 \Rightarrow \mu = 1 \\ \quad \quad \quad \eta \\ 4\mu - 2 = -5\mu + 3 \Rightarrow 9\mu = 5 \Rightarrow \mu = \frac{5}{9} \end{cases} \end{aligned}$$

11.3 2)

$$\begin{aligned} d(A, \varepsilon_1) = d(A, \varepsilon_2) &\Rightarrow \frac{|\mu - 3(\mu - 3) + 2|}{\sqrt{1^2 + (-3)^2}} = \frac{|3\mu + (\mu - 3) + 2|}{\sqrt{3^2 + 1^2}} \Rightarrow \\ &\Rightarrow |\mu - 3\mu + 9 + 2| = |3\mu + \mu - 3 + 2| \Rightarrow |11 - 2\mu| = |4\mu - 1| \Rightarrow \begin{cases} 11 - 2\mu = 4\mu - 1 \\ \quad \quad \quad \dot{\eta} \\ 11 - 2\mu = 1 - 4\mu \end{cases} \Rightarrow \begin{cases} \mu = 2 \\ \quad \quad \quad \dot{\eta} \\ \mu = -5 \end{cases} \end{aligned}$$

11.3 3)

$$\begin{aligned} d(A, \varepsilon_1) = d(A, \varepsilon_2) &\Rightarrow \frac{|\mu - 1 + \mu + 2 - 3|}{\sqrt{1^2 + 1^2}} = \frac{|\mu - 1 - (\mu + 2) + 1|}{\sqrt{1^2 + (-1)^2}} \Rightarrow \\ &\Rightarrow |2\mu - 2| = |-2| \Rightarrow |2\mu - 2| = 2 \Rightarrow \begin{cases} 2\mu - 2 = 2 \\ \quad \quad \quad \dot{\eta} \\ 2\mu - 2 = -2 \end{cases} \Rightarrow \begin{cases} \mu = 2 \\ \quad \quad \quad \dot{\eta} \\ \mu = 0 \end{cases} \end{aligned}$$

11.3 4)

$$\begin{aligned} d(A, \varepsilon_1) = d(A, \varepsilon_2) &\Rightarrow \frac{|3(\mu-2) - 2(\mu-4) + 1|}{\sqrt{3^2 + (-2)^2}} = \frac{|2(\mu-2) + 3(\mu-4) - 5|}{\sqrt{2^2 + 3^2}} \Rightarrow \\ &\Rightarrow |3\mu - 6 - 2\mu + 8 + 1| = |2\mu - 4 + 3\mu - 12 - 5| \Rightarrow |\mu + 3| = |5\mu - 21| \Rightarrow \begin{cases} \mu + 2 = 5\mu - 21 \\ \mu + 2 = 21 - 5\mu \end{cases} \Rightarrow \begin{cases} \mu = 6 \\ \mu = 3 \end{cases} \end{aligned}$$