Q1. If x is real, then the values of $\frac{x^2+34x-71}{x^2+2x-7}$ does not lie in

(a) [5,9]

(b) $(-\infty,5]$

(c) $[9,\infty)$

(d) $R-(5,9)$

Q2. If α,β are the roots of the quadratic equation $x^2-2(1-\sin 2\theta)x-2\cos^2 2\theta=0,(\theta\in R)$ then the minimum value of $\left(\alpha^2+\beta^2\right)$ is equal to :

(a) –4

(b) 8

(c) 0

(d) 2

Q3. If $f(x)=\left|4x^2-4x\right|\sin\theta\left|-\cos^2\theta\right|$, then the minimum value of $f(x)$ is equal to