

Q1. If $|z^2 - 1| = |z|^2 + 1$ then z lies on a

- (a) circle
- (b) parabola
- (c) ellipse
- (d) none

Q2. Find the number of solutions of the equation $z^2 + \bar{z} = 0$

- (a) 1
- (b) 2
- (c) 3
- (d) 4

Q3. The number of complex numbers z which satisfy $z^2 + 2|z|^2 = 2$

- (a) 0
- (b) 2
- (c) 3
- (d) 4