

| Question | Scheme | Marks | AOs |
|-------------|---------------------------------------|-------|------|
| 1(a) | $z = \pm 4$ | B1 | 1.1b |
| | $z = -3 \pm 2i$ | B1 | 1.1b |
| | | (2) | |
| (b) | $a = 16$ | B1 | 1.1a |
| | A complete method to find b and c | M1 | 3.1a |
| | $b = 6$ and $c = 13$ | A1 | 1.1b |
| | | (3) | |

(5 marks)

Notes:

(a)

B1: Correct values only

B1: Correct values only

(b)

B1: Correct value

M1: Uses the complex roots or multiplies out and compares coefficients

A1: Correct values only