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| 12 | 3 | The quadratic equation $x^2 + 3x - 1 = 0$ has roots α and β.
 What is the value of $\alpha\beta + (\alpha + \beta)$?
 (A) 4   (B) 2   (C) −4   (D) −2 | 1 |

C

State Mean:
0.84

$$x^2 + 3x - 1 = 0$$

$$\alpha + \beta = \frac{-b}{a}$$

$$= -3$$

$$\alpha\beta = \frac{c}{a}$$

$$= -1$$

$$\alpha\beta + (\alpha + \beta) = -1 + (-3)$$

$$= -4$$

* These solutions have been provided by *projectmaths* and are not supplied or endorsed by the Board of Studies