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**2014 11b** Factorise  $3x^2 + x - 2$ .

**2**

$$3x^2 + x - 2 = (3x - 2)(x + 1)$$

State Mean:  
**1.75**

\* These solutions have been provided by [projectmaths](#) and are not supplied or endorsed by BOSTES.

### Board of Studies: Notes from the Marking Centre

A variety of methods to factorise the given expression was used successfully.

Common problems were:

- solving the equation  $(3x - 2)(x + 1) = 0$  after factorising correctly;
- giving an answer in the form  $(x - \frac{2}{3})(x + 1)$ ;
- using the quadratic formula to solve  $3x^2 + x - 2$ , leading to  $(x - \frac{2}{3})(x + 1) = 0$ ;
- mixing signs and terms resulting in answers such as  $(3x - 1)(x + 2)$  or  $-(3x + 2)(x - 1)$ .

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