

**Ex5**

Factorise the following quadratic expression into double brackets.

$$6x^2 - 5x - 6$$

**Ex6**

Factorise the following quadratic expression into double brackets.

$$5x^2 + 2x - 3$$

**Q4**

Factorise the following quadratic expression into double brackets.

[a]  $4(3x^2 + 4x) - 3$

[b]  $4x(x + 1) - 15$

[c]  $4(3x^2 - 7) + 5x$

[d]  $9x(2x - 1) - 5$

[e]  $20x^2 + 9(3x + 1)$

**Q5**

Fill in the missing boxes to make the following true.

[a]  $6x^2 - x - \boxed{\phantom{00}} = (2x + 1)(3x - 2)$

[b]  $x^2 - \boxed{\phantom{00}} - 2 = (3x + 1)(3x - 2)$

[c]  $20x^2 - 11x - 3 = (\boxed{\phantom{00}}x - 3)(5x + 1)$

[d]  $12x^2 + 28x - 5 = (6x - 1)(\boxed{\phantom{00}}x + 5)$

[e]  $\boxed{\phantom{00}}x^2 + 23x - 12 = (2x + 3)(5x + 4)$

[f]  $9x^2 + 15x - 14 = (3x - 2)(3x \boxed{\phantom{00}})$

[g]  $6x^2 \boxed{\phantom{00}} x - 3 = (7x + 1)(2x - 3)$

**Q6** Factorise the following quadratic expressions into double brackets.

[a]  $x^2 + 2x - 3$

[i]  $12x^2 + 23x + 10$

[b]  $x^2 - 2x - 15$

[j]  $x^2 + 2x - 99$

[c]  $x^2 - 2x - 35$

[k]  $x^2 - 2x - 99$

[d]  $x^2 + 5x - 14$

[l]  $15x^2 + 16x + 4$

[e]  $x^2 + 3x - 4$

[m]  $x^2 + 9x - 36$

[f]  $x^2 - 4x - 12$

[n]  $6x^2 - 11x + 4$

[g]  $2x^2 - 9x + 10$

[o]  $4x^2 + 15x + 9$

[h]  $3x^2 - 7x - 20$

[p]  $3x^2 + 20x + 25$