



## Factor the Quadratic Equation with Coefficient - Split X Terms To Partial

**Answer**

**1** Find common factors of the first 2 and last 2 terms

$$15p^2 + 12p + 35p + 28$$

A  $5p(3p + 4) - 7(3p + 4)$

B  $3p(5p - 4) - 7(5p - 4)$

C  $3p(5p + 4) + 7(5p + 4)$

D  $3p(5p + 7) - 4(5p + 7)$

**2** Find common factors of the first 2 and last 2 terms

$$36m^2 + 16m + 27m + 12$$

A  $4m(9m - 4) - 3(9m - 4)$

B  $9m(4m + 4) - 3(4m + 4)$

C  $4m(9m + 3) - 4(9m + 3)$

D  $4m(9m + 4) + 3(9m + 4)$

**3** Find common factors of the first 2 and last 2 terms

$$42t^2 + 35t + 36t + 30$$

A  $7t(6t - 5) - 6(6t - 5)$

B  $6t(7t + 5) - 6(7t + 5)$

C  $7t(6t + 6) - 5(6t + 6)$

D  $7t(6t + 5) + 6(6t + 5)$

**4** Find common factors of the first 2 and last 2 terms

$$35t^2 + 42t + 20t + 24$$

A  $7t(5t - 6) - 4(5t - 6)$

B  $7t(5t + 6) + 4(5t + 6)$

C  $5t(7t + 6) - 4(7t + 6)$

D  $7t(5t + 4) - 6(5t + 4)$

**5** Find common factors of the first 2 and last 2 terms

$$63p^2 + 36p + 35p + 20$$

A  $9p(7p + 4) + 5(7p + 4)$

B  $9p(7p - 4) - 5(7p - 4)$

C  $9p(7p + 5) - 4(7p + 5)$

D  $7p(9p + 4) - 5(9p + 4)$

**6** Find common factors of the first 2 and last 2 terms

$$21w^2 + 56w + 15w + 40$$

A  $7w(3w + 8) + 5(3w + 8)$

B  $3w(7w + 8) - 5(7w + 8)$

C  $7w(3w - 8) - 5(3w - 8)$

D  $7w(3w + 5) - 8(3w + 5)$

**7** Find common factors of the first 2 and last 2 terms

$$48y^2 + 56y - 30y - 35$$

A  $8y(6y + 5) - 7(6y + 5)$

B  $8y(6y - 7) - 5(6y - 7)$

C  $8y(6y + 7) + 5(6y + 7)$

D  $8y(6y + 7) - 5(6y + 7)$

E  $6y(8y + 7) - 5(8y + 7)$

**8** Find common factors of the first 2 and last 2 terms

$$28y^2 + 21y + 36y + 27$$

A  $7y(4y - 3) - 9(4y - 3)$

B  $7y(4y + 3) + 9(4y + 3)$

C  $4y(7y + 3) - 9(7y + 3)$

D  $7y(4y + 9) - 3(4y + 9)$