



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

### Answer

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

$$5w^2 + 45w + 8w + 72$$

A  $5w(w + 9) + 8(w + 9)$

B  $5w(5w + 9) - 8(5w + 9)$

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

$$9m^2 + 54m + 8m + 48$$

A  $4m(9m + 6) - 8(9m + 6)$

B  $9m(m + 6) + 8(m + 6)$

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

$$8z^2 + 32z + 5z + 20$$

A  $8z(8z + 4) - 5(8z + 4)$

B  $8z(z + 4) + 5(z + 4)$

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

$$25m^2 + 45m + 30m + 54$$

A  $5m(5m + 9) + 6(5m + 9)$

B  $5m(5m + 6) - 9(5m + 6)$

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

$$7m^2 + 35m + 6m + 30$$

A  $7m(7m + 5) + 6(7m + 5)$

B  $7m(m + 5) + 6(m + 5)$

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

$$8q^2 + 20q + 18q + 45$$

A  $4q(2q + 5) + 9(2q + 5)$

B  $2q(4q + 5) - 9(4q + 5)$

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

$$14r^2 + 63r + 16r + 72$$

A  $7r(2r + 9) + 8(2r + 9)$

B  $7r(2r - 9) - 8(2r - 9)$

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

$$4w^2 + 20w + 3w + 15$$

A  $4w(7w + 5) + 3(7w + 5)$

B  $4w(w + 5) + 3(w + 5)$