Factorisation

Factorisation by Regrouping Terms

EXERCISE

Q1. $x^2 + xy + 8x + 8y$ = ...

Q2. $15xy - 6x + 5y - 2$ =.....

Q3. $ax + bx - ay - by$ =.....

Q4. $15pq + 15 + 9q + 25p$ =.....

Q5. $z - 7 + 7xy - xyz$ =.....

Q6. True or False:

I. Factorization by regrouping terms is a method used to simplify algebraic expressions.

II. In factorization by regrouping terms, we rearrange the terms of an expression to create a perfect square or a difference of squares.

III. The expression $4x^2-16$ can be factorized using the difference of squares method.

IV. To factorize $9y^2 -12xy + 4x^2$we look for a common factor among all the terms.

V. The expression $25a^2 - 30ab + 9b^2$ can be factorized as $(5a-3b)(5a-3b)$.

ANSWER KEY

1. $(x+y)(x+8)$.
2. $(3x+1)(5y-2)$.
3. $(a+b)(x-y)$.
4. $5p(3q+5)+3(5+3q)$
5. $(z-7)(1-xy)$
6. (i) True (ii) False (iii) True (iv) False (v) True