

Examples:

1. Find value of k , if $(x - 1)$ is factor of $p(x) = kx^2 - 3x + k$.
2. Factorise $2y^3 + y^2 - 2y - 1$.
3. Which of the following is a factor of $6x^3 + 5x^2 - 2x - 1$? (Ans: B)
 - a. $x - 1$
 - b. $2x - 1$
 - c. $3x - 1$
 - d. $4x - 1$

4. Factorize $6x^2 + 17x + 5$ by splitting the middle term.

5. Factorize $ab + bc + ax + cx$

6. If Both $(x + 1)$ and $(x - 1)$ are factors of $ax^3 + x^2 - 2x + b$. Find a and b . (Ans: $a = 2$ and $b = -1$)

7. Factorize $3x^3 - x^2 - 3x + 1$.

8. If $x^2 - 1$ is a factor of $ax^4 + bx^3 + cx^2 + dx + e$, show that $a+b+c+d+e = 0$