

Factor each expression:

1. $8m^3 - 4m^2$

5. $2x^2 + 7x + 5$

2. $30x^2y - 20x^2y^2 + 10x^3y^2$

6. $6x^2 - 11xy + 3y^2$

3. $2ax - ay + 4bx - 2by$

7. $a^2 + 5a - 14$

4. $6x^2 + 2xy - 15x - 5y$

8. $p^2 - 5pq - 24q^2$

Completely factor each expression:

9. $12a^3 - 94a^2 - 16a$

11. $6m^2n - 12mn^2 - 10mn + 20n^2$

10. $7c^2d - 35cd^2 + 42d^3$

Determine **ALL** integral values of k so that each trinomial can be factored:

12. $x^2 + kx - 9$

13. $3x^2 + kx + 7$

Determine **TWO** integral values of k so that each trinomial can be factored:

14. $x^2 - 3x + k$

15. $3x^2 + 4x + k$