

Factoring WS P3 C

Name _____

Factor completely. If the polynomial is not factorable, write *prime*.

1. $24x^2 + 96x$

2. $5x^2 - 35x - 150$

3. $2a^3 - 6a^2b - 56b^2a$

4. $x^2 + 11xy + 24y^2$

5. $y^2 - y - 72$

6. $14b^3 - 35b^2 - 8b + 20$

7. $-2w^3 + 4w^2 + 16w$

8. $4x^2 - 31x - 90$

9. $a^2 - 2a + 15$

10. $5x^3 + x^2 - 30x - 6$

11. $10x^3 - 41x^2 + 40x$

12. $8x^2 + 77x - 30$

13. $m^2 + 2mn - 63n^2$

14. $6v^2 + 18v + 12$

15. $30x^3 + 24x^2 + 5x + 4$

16. $24a^3 + 6a^2 - 45a$

17. $x^2 - 6x + 8$

18. $54k^2 - 36k - 210$

Factor completely. If the polynomial is not factorable, write *prime*.

1. $-17x^2 + 51$

2. $-x^2 + 5x + 14$

3. $9x^3 + 6x^2 + 15x + 10$

4. $3p^2 - 13p - 10$

5. $a^2 + 12 + 13a$

6. $10x^2 + 5x$

7. $-w^2 + 13w - 42$

8. $6x^2 + x - 35$

9. $y^2 - 4y + 12$

10. $6y^3 - 9y^2 - 2y + 3$

11. $-13x^2 - 52$

12. $21x^3 - 14x^2 + 56x$

13. $4x^2 + 7x - 15$

14. $v^2 - 11v + 24$

15. $x^5 - 7x^3 - 5x^2 + 35$