

Assignment: Show all work on these pages in pencil.

Factor completely.

1. $6x^3 + 12x^2 + 3x$

2. $x^2 - 9x + 14$

3. $3x^2 + 3x - 6$

4. $3x^2 + 5x - 8$

5. $18x^2 + 39x - 15$

6. $12x^2 - 75$

7. $16x^4 - 81$

8. $2x(x - 2) + 3(x - 2)$

9. $(x + 1)^2 + 4(x + 1) - 5$

10. $2(x - 1)^2 - 6(x - 1) + 4$

11. $(x + 2)^2 - (x - 3)^2$

12. $3(x - 3)^2 + 5(x - 3) - 8$

$$13. 4(x+7)^2 + 8(x+7) + 3$$

$$14. (7x-5)^2 - 8(7x-5) + 15$$

$$15. 9(2x+1)^2 - 42(2x+1) + 49$$

$$16. (x^2-x)^2 - 8(x^2-x) + 12$$

$$17. (4x^2+4x+3)^2 - 8(4x^2+4x+3) + 12$$