Polynomials and Factoring: Worksheet

Algebra · Worksheet for https://jugami.com/algebra/polynomials/ · For instant feedback, try the self-guided quiz online.

Name _____ Date _____

Work each one on paper. Show your work, and factor completely.

1. Simplify: $(3x^2 + 2x - 5) - (x^2 - 4x + 1)$

Answer: _____

2. Multiply: $-3x(2x^2 - 4x + 1)$

Answer: _____

3. Multiply: $(2x + 3)(x - 4)$

Answer: _____

4. Multiply: $(x + 6)^2$

Answer: _____

5. Factor completely: $6x^3 - 9x^2 - 6x$

Answer: _____

6. Factor: $x^2 + 11x + 24$

Answer: _____

7. Factor: $x^2 - 3x - 28$

Answer: _____

8. Factor: $3x^2 + 10x - 8$

Answer: _____

9. Factor: $25x^2 - 9$

Answer: _____

10. Factor completely: $2x^3 + 12x^2 + 18x$

Answer: _____

Bonus

A little extra practice with the same skills.

11. Multiply: $(x + 4)(x - 9)$

Answer: _____

12. Factor: $x^2 + 9x + 18$

Answer: _____

13. Factor completely: $3x^2 - 48$

Answer: _____