

## Polynomial PRACTICE QUIZ

Date \_\_\_\_\_ Period \_\_\_\_\_

**Name each polynomial by degree and number of terms.**

1)  $-2m^2 + 4m - 9$

2)  $3 - 7n$

**Simplify each sum or difference. Leave your final answer in standard form.**

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

4)  $(8 - 4x^4) - (6 + x^4)$

5)  $(8p^2 - 8p + 4p^4) + (7p^4 + 2p^2)$

6)  $(8x^4 - 2x - 6) - (4 - 3x - x^4)$

**Find each product.**

7)  $2x(2x - 3)$

8)  $5(3b^2 - 4b + 3)$

**Factor the common factor out of each expression.**

9)  $20r^5 + 4r$

10)  $-5b^8 + 15b^4 + 15b^3$

**Find each product.**

11)  $(4m + 1)(4m - 6)$

12)  $(7p + 5)(7p^2 + 8p + 8)$

**BONUS: Find each product.**

13)  $(5p^2 + 2p - 2)(7p^2 - 4p + 4)$

## Answers to Polynomial PRACTICE QUIZ

- 1) quadratic trinomial      2) linear binomial      3)  $-5x + 6$       4)  $-5x^4 + 2$   
5)  $11p^4 + 10p^2 - 8p$       6)  $9x^4 + x - 10$       7)  $4x^2 - 6x$       8)  $15b^2 - 20b + 15$   
9)  $4r(5r^4 + 1)$       10)  $5b^3(-b^5 + 3b + 3)$       11)  $16m^2 - 20m - 6$   
12)  $49p^3 + 91p^2 + 96p + 40$       13)  $35p^4 - 6p^3 - 2p^2 + 16p - 8$