

Unit 7 Multiply and Factor Review

Date _____ Period _____

Multiply using either generic rectangles or FOIL. Show work.

1) $(2x - 6)(5x + 8)$

2) $(8m - 5)(4m - 7)$

3) $(7r + 6)(8r - 6)$

4) $(2b - 2)(7b + 2)$

5) $(6p - 6)(7p^2 + 6p - 2)$

6) $(8x + 1)(4x^2 + x - 4)$

Factor the common factor out of each expression.

7) $-50v^7 + 15v^5 + 20v^4$

8) $9x^6 + 54x^7$

9) $-56x^3 - 56x^2 + 80x - 40$

10) $-72n^6 + 80n^5$

Factor each completely. Remember to factor our common factor first if there is one. Use Diamond method to factor.

11) $3v^2 - 3v - 90$

12) $v^2 + 18v + 81$

13) $x^2 + 4x - 60$

14) $4a^2 - 4a - 168$

Answers to Unit 7 Multiply and Factor Review (ID: 1)

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|------------------------------|--------------------------------|----------------------------|-----------------------|
| 1) $10x^2 - 14x - 48$ | 2) $32m^2 - 76m + 35$ | 3) $56r^2 + 6r - 36$ | 4) $14b^2 - 10b - 4$ |
| 5) $42p^3 - 6p^2 - 48p + 12$ | 6) $32x^3 + 12x^2 - 31x - 4$ | 7) $5v^4(-10v^3 + 3v + 4)$ | |
| 8) $9x^6(1 + 6x)$ | 9) $8(-7x^3 - 7x^2 + 10x - 5)$ | 10) $8n^5(-9n + 10)$ | |
| 11) $3(v - 6)(v + 5)$ | 12) $(v + 9)^2$ | 13) $(x + 10)(x - 6)$ | 14) $4(a - 7)(a + 6)$ |