

Unit 7 - Day 15 - Study Guide

Find each product.

1) $(5x - 2)^2$
 $25x^2 - 20x + 4$

2) $(2x + 2)(2x - 2)$
 $4x^2 - 4$

3) $(2n - 3)(2n + 3)$
 $4n^2 - 9$

4) $(4k - 7)(4k + 7)$
 $16k^2 - 49$

5) $(3n - 5)(3n + 5)$
 $9n^2 - 25$

6) $(6r - 4)^2$
 $36r^2 - 48r + 16$

Factor the common factor out of each expression.

7) $7n^8 + 4n^4 + 6n^3 - n^2$
 $n^2(7n^6 + 4n^2 + 6n - 1)$

8) $24 + 21x + 27x^2 - 6x^5$
 $3(8 + 7x + 9x^2 - 2x^5)$

9) $32k^6 + 4k^3 + 20k + 28$
 $4(8k^6 + k^3 + 5k + 7)$

10) $-27a^4 - 36a^3$
 $-9a^3(3a + 4)$

11) $-27p + 72$
 $9(-3p + 8)$

12) $36x^3 + 20x^2 - 20x$
 $4x(9x^2 + 5x - 5)$

13) $-24x^2 - 20x - 20$
 $-4(6x^2 + 5x + 5)$

14) $12 + 28x + 12x^2$
 $4(3 + 7x + 3x^2)$