

Unit 3.1b Factoring Polynomials Review Hw WS

Factor each completely. PLACE ONLY THE ANSWER ON THIS SHEET, ALL WORK ON A SEPARATE SHEET.

1) $n^2 - 12n$

$n(n - 12)$

2) $7v^2 + 24v - 16$

$(7v - 4)(v + 4)$

3) $8n^2 - 6n - 27$

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

4) $42n^2 + 348n - 270$

$6(7n - 5)(n + 9)$

5) $10a^2 + 12a$

$2a(5a + 6)$

6) $15p^2 - 51p + 42$

$3(5p - 7)(p - 2)$

7) $10n^2 - 54n - 36$

$2(5n + 3)(n - 6)$

8) $25b^2 - 4$

$(5b + 2)(5b - 2)$

9) $9n^2 - 25$

$(3n + 5)(3n - 5)$

10) $4r^2 - 4r + 1$

$(2r - 1)^2$

11) $54n^3 + 45n^2 + 30n + 25$

$(9n^2 + 5)(6n + 5)$

12) $27n^3 - 18n^2 + 24n - 16$

$(9n^2 + 8)(3n - 2)$

13) $u^4 + 13u^2 + 30$

$(u^2 + 10)(u^2 + 3)$

14) $7x^4 - 62x^2 - 9$

$(7x^2 + 1)(x - 3)(x + 3)$