

Homework: Worksheet E

Factor each completely.

1) $x^4 + 4x^2 - 45$

2) $4u^4 - 76u^2 + 360$

3) $15x^4 - 72x^2 - 108$

4) $5a^4 + 12a^2 - 32$

5) $10x^4 + 11x^2 - 8$

6) $16a^4 - 16a^2 - 5$

7) $12x^3 - 3x^2 + 32x - 8$

8) $5r^3 - 6r^2 - 20r + 24$

9) $25n^3 - 40n^2 + 10n - 16$

10) $16v^3 + 8v^2 - 10v - 5$

11) $8x^3 + 28x^2 - 6x - 21$

12) $24n^3 + 15n^2 + 8n + 5$

13) $21r^3 - 9r^2 - 35r + 15$

14) $40b^3 - 15b^2 + 8b - 3$

15) $35k^3 + 175k^2 - 56k - 280$

16) $56n^3 + 32n^2 - 35n - 20$

Answers to Homework: Worksheet E

- | | | | |
|-----------------------------|--------------------------------|---------------------------|--------------------------|
| 1) $(x^2 - 5)(x^2 + 9)$ | 2) $4(u - 3)(u + 3)(u^2 - 10)$ | 3) $3(5x^2 + 6)(x^2 - 6)$ | |
| 4) $(5a^2 - 8)(a^2 + 4)$ | 5) $(2x^2 - 1)(5x^2 + 8)$ | 6) $(4a^2 - 5)(4a^2 + 1)$ | 7) $(3x^2 + 8)(4x - 1)$ |
| 8) $(r - 2)(r + 2)(5r - 6)$ | 9) $(5n^2 + 2)(5n - 8)$ | 10) $(8v^2 - 5)(2v + 1)$ | |
| 11) $(4x^2 - 3)(2x + 7)$ | 12) $(3n^2 + 1)(8n + 5)$ | 13) $(3r^2 - 5)(7r - 3)$ | 14) $(5b^2 + 1)(8b - 3)$ |
| 15) $7(5k^2 - 8)(k + 5)$ | 16) $(8n^2 - 5)(7n + 4)$ | | |