

Algebra

Name:

Date:

2 Factoring Answer

Factor each expression.

1. $-4a + 18$

$-2(2a - 9)$

2. $6v^6 + 42vu^3 - 6v^2u + 30v$

$6v(v^5 + 7u^3 - vu + 5)$

3. $21x^3 - 9x^2 - 35x + 15$

$(7x - 3)(3x^2 - 5)$

4. $2x^4z^2 + 2x^5 + 6x^2yz - 10x^2z^2$

$2x^2(x^2z^2 + x^3 + 3yz - 5z^2)$

5. $21n^3 + 24n^2 - 28n - 32$

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

6. $54x^5 + 12xy^2 + 12xy + 12x^2$

$6x(9x^4 + 2y^2 + 2y + 2x)$

7. $21x^3 + 28x^2 - 12x - 16$

$(3x + 4)(7x^2 - 4)$

8. $-15y^3 + 5x^3yz^2 + 40x^5z$

$-5(3y^3 - x^3yz^2 - 8x^5z)$

9. $7n^3 + 35n^2 - 4n - 20$

$(n + 5)(7n^2 - 4)$

10. $36x^2y^4z - 6x^2y^2z + 18xy^2z + 6xy^2$

$6xy^2(6xy^2z - xz + 3z + 1)$

11. $-56x + 64$

$-8(7x - 8)$

12. $-60xy - 30y^2 - 20$

$-10(6xy + 3y^2 + 2)$