



MAth on the Fly!



NAME: _____ DATE: _____

Factoring Out the Greatest Common Factor

Factor out the GCF from each polynomial.

1. $14x - 7$

2. $x^2 + x$

3. $16x + 12y - 8z$

4. $2x^3 + 5x^4 - 7x^5$

5. $3x^4 + 15x^3 - 12x^2$

6. $25x^2 - 50x + 75$

7. $x^3y - x^2y^2 - xy$

8. $7xy + 7wx + 7xz$

9. $6xy + 4xz + 8yz$

10. $xyz^4 - x^2yz^3$

11. $9y^3 - 21xy - 24y^2$

12. $35x^4y^7 - 40x^6y^5$

13. $8w^5x^4y^3z^2 - 2w^2x^3y^4z^5$

14. $45x^2y - 81xy^2 - 18xy$

SOLUTIONS

1. $7(2x - 1)$

2. $x(x + 1)$

3. $4(4x + 3y - 2z)$

4. $x^3(2 + 5x - 7x^2)$

5. $3x^2(x^2 + 5x - 4)$

6. $25(x^2 - 2x + 3)$

7. $xy(x^2 - xy - 1)$

8. $7x(y + w + z)$

9. $2(3xy + 2xz + 4yz)$

10. $xyz^3(z - x)$

11. $3y(3y^2 - 7x - 8y)$

12. $5x^4y^5(7y^2 - 8x^2)$

13. $2w^2x^3y^3z^2(4w^3x - yz^3)$

14. $9xy(5x - 9y - 2)$