Adding Polynomials

Identify as a monomial, binomial, or trinomial.

1. $5xyz$
2. $x + 2y$
3. $a - 2b + 3c$
4. $x^2 + y^2$
5. 23
6. $x - y + 2$

State the degree of each monomial.

7. $25x$
8. $25x^2y^2$
9. 17
10. $2x^2y^3$
11. $-5x^3y^4$
12. $-6xy^4z$

State the degree of each polynomial.

13. $5x^2y^2 + 3xy^3$
14. $3x + 2y - 5z$
15. $x^4 + 2x^3 + 3x^2 + 4$
16. $4x^4y^2 + 2x^3y^5 - 23$
17. $3x - 2y + z^2$

Simplify.

18. $(5z + 6 - 3z^2) + (4 - 7z + 2z^2)$
19. $(3x^2 + 2y^2 - 5) + (4x^2 + 3y^2 - 11)$
20. $(2x^4 + 7x - 5x^2 + 3) + (2x^3 - 7)$

Add.

21. $(5x^2 + 7x - 7) + (4x^2 - 8x + 12)$
22. $(3y^2 - 8y + 3) + (2y^2 + 8y - 9)$
23. $(m^3 + 5m^2 + 3) + (4m^2 + 7)$
24. $(x^2 + x + 3) + (x^2 - 6) + (x^2 - 2x - 3)$

Simplify.

25. $(4x^2 + 3xy - 2y^2) + (-x^2 - 5xy + 7y^2)$
26. $(5y^2 + 3y - 7) + (-2y^2 - 5y + 8)$
27. $(3x^2y - 2xy + 4y^2) + (x^2y + y^2)$

Subtracting Polynomials

Write the opposite.

1. $x^2 + 4x + 1$
2. $x^2 - 2x - 3$
3. $2x^2 + x - 5$
4. $-3x^2 - 7x + 2$

Subtract.

5. $(3x - 5) - (x + 2)$
6. $(x + 5) - (3x - 1)$
7. $(x + 4) - (-x - 3)$
8. $(3x - 5) - (x + 4)$

Subtract.

9. $5x^2 + 3x - 5$ minus $2x^2 - 5x - 4$
10. $-3x^2 + 5x - 7$ minus $2x^2 + 3x - 3$
11. $-4x^2 - 4x + 3$ minus $-3x^2 + 4x - 8$
12. $x^2 - 5x + 1$ minus $x^2 - 5x + 6$
13. $x^2 + 7x - 1$ minus $x^2 + 4x + 1$
14. $12x^3 + 3x^2 - 5x$ minus $9x^3 + 4x^2 - 4x$

Subtract.

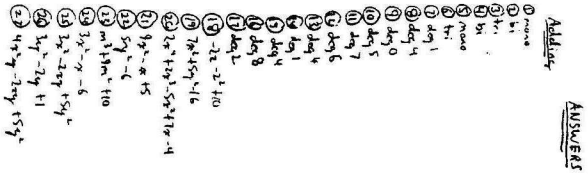
15. $(2y^2 + 3y - 5) - (2y^2 + 4y + 6)$
16. $(4s^2 + s - 2) - (-3s^2 + s - 5)$
17. $(y^2 - 5y + 3) - (-2y^2 + 7y + 5)$

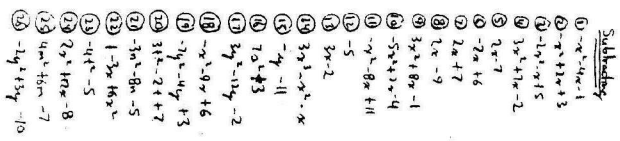
Subtract.

18. $3x^2 + 7x - 3$ from $2x^2 - 2x + 3$
19. $5y^2 + 7y - 5$ from $-2y^2 + 3y - 2$
20. $-t^2 + 5t - 1$ from $2t^2 + 3t + 6$

Simplify.

21. $(-5n^2 - n - 8) - (-2n^2 + 7n - 3)$
22. $(4 + 2x - x^2) - (3 - 7x^2 + 5x)$
23. $(-t^2 + 4t - 7) - (3t^2 + 4t - 2)$
24. $(x^2 + 5x + 3) - (-x^2 - 7x + 11)$
25. $(3m^2 + 7m - 8) - (-m^2 + m - 1)$
26. $(-5y^2 + 7y - 12) - (-3y^2 + 4y - 2)$





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Simplify.

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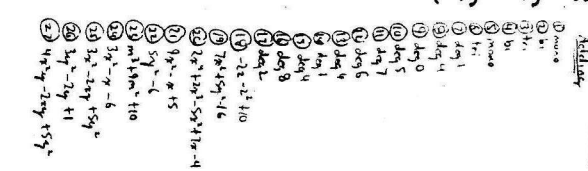

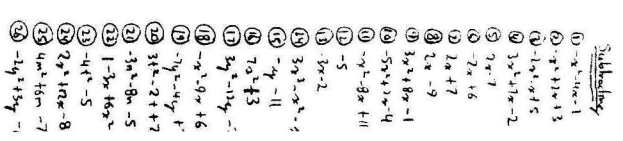

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Write the opposite.

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

Subtract.

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6. $(x + 5) - (3x - 1)$
7. $(x + 4) - (-x - 3)$
8. $(3x - 5) - (x + 4)$

Subtract.

9. $5x^2 + 3x - 5$ minus $2x^2 - 5x - 4$
10. $-3x^2 + 5x - 7$ minus $2x^2 + 3x - 3$
11. $-4x^2 - 4x + 3$ minus $-3x^2 + 4x - 8$
12. $x^2 - 5x + 1$ minus $x^2 - 5x + 6$
13. $x^2 + 7x - 1$ minus $x^2 + 4x + 1$
14. $12x^3 + 3x^2 - 5x$ minus $9x^3 + 4x^2 - 4x$

Subtract.

15. $(2y^2 + 3y - 5) - (2y^2 + 4y + 6)$
16. $(4s^2 + s - 2) - (-3s^2 + s - 5)$
17. $(y^2 - 5y + 3) - (-2y^2 + 7y + 5)$

Subtract.

18. $3x^2 + 7x - 3$ from $2x^2 - 2x + 3$
19. $5y^2 + 7y - 5$ from $-2y^2 + 3y - 2$
20. $-t^2 + 5t - 1$ from $2t^2 + 3t + 6$

Simplify.

21. $(-5n^2 - n - 8) - (-2n^2 + 7n - 3)$
22. $(4 + 2x - x^2) - (3 - 7x^2 + 5x)$
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