

Substitution Bingo

Draw a 3 by 3 grid and enter 9 numbers between 1 and 30. Then,

$$a = 3 \quad b = 4 \quad c = 5 \quad d = 2$$

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|------------|---------------|---------------|
| 1. $b - a$ | 11. $ad + c$ | 21. $cb + 1$ |
| 2. $c - a$ | 12. ab | 22. $c^2 - a$ |
| 3. $c - d$ | 13. $ca - d$ | 23. $c^2 - d$ |
| 4. b | 14. $2c + b$ | 24. $6b$ |
| 5. $a + d$ | 15. ac | 25. c^2 |
| 6. ad | 16. b^2 | 26. $6c - b$ |
| 7. $a + b$ | 17. $4c - a$ | 27. $c^2 + d$ |
| 8. $2b$ | 18. $b^2 + d$ | 28. $6c - d$ |
| 9. a^2 | 19. $b^2 + a$ | 29. $c^2 + b$ |
| 10. cd | 20. cb | 30. $6c$ |

Extension

Pick four different numbers between 1 and 9 for the letters a, b, c and d . Use these letters to make a new version of substitution bingo. (TIP: use two odd numbers and two even numbers for a, b, c and d).