1. Solve the system by substitution:
   $2x + y = 13$
   $5x - 8y = -20$

2. Solve the system by substitution:
   $5x + y = 3$
   $4x + y = 3$

3. Solve the system by substitution:
   $4x + y = 4$
   $-7x + 6y = -69$

4. Solve the system by substitution:
   $x + 2y = 5$
   $3x - y = 8$

5. Solve the system by substitution:
   $3x + y = 29$
   $5x - 8y = 29$

6. Solve the system by substitution:
   $5x + y = -8$
   $2x + y = -5$

7. Solve the system by substitution:
   $-7x + y = 43$
   $4x - 6y = 8$

8. Solve the system by substitution:
   $3x + y = -10$
   $x + y = -6$

9. Solve the system by substitution:
   $-2x + y = 5$
   $-3x - 6y = -60$

10. Solve the system by substitution:
$x + y = -6$
$5x - y = -24$

11. Solve the system by substitution:
$2x + y = 9$
$-5x + 3y = -61$

12. Solve the system by substitution:
$3x + y = -4$
$x + 6y = 27$

13. A ski club planned a trip to Mount Bachelor, and 110 of the members signed up. If 50% of the members did not sign up, how many members does the club have?

14. The experimental treatment caused side effects in 50% of those who had it. If 1000 experienced side effects, how many people had the experimental treatment?

15. The cost of building a house increases 21 percent every year. If it costs $83,000 to build a house this year, what would it cost to build a house next year?

16. Arby peeked around the bush and spied 770 gnomes gathered in the glen. If this was 40 percent more than Konstantine spied under the tree, how many gnomes did Konstantine spy?

17. The number of bacteria increased by 295 percent overnight. If there were 75,000 bacteria yesterday, how many bacteria were present this morning?

18. The sun coming out from behind the clouds caused the number of people swimming to increase by 270 percent. If 250 swimmers were there before the sun came out, how many were there after the sun came out?

19. Add. Write the answer with all exponents positive. $x^3y^{-3} + 9z^{-1}$

20. Add. Write the answer with all exponents positive. $x^{-3}yz^2 + w^3y^3z$

21. Add. Write the answer with all exponents positive. $x^{-2}y^2 + 4z^{-2}$

22. Add. Write the answer with all exponents positive. $x^{-1}y^3z^2 + wyz^2$

Simplify. Write the answer with all positive exponents.

23. $\dfrac{8x^{-2}y^{-2}\left(x^4\right)^{-2}y^2x^2y}{\left(2x^0\right)^2x^{-6}y^{-2}\left(x^{-2}\,y^4\right)^0}$

24. $\dfrac{x^5y^4z^0\left(x^3y^0\right)^{-1}x^5y^{-2}\left(z^{-2}\right)^2}{x^3\left(y^{-1}\right)^0x^2y^3x^{-1}\left(z^{-1}\right)^{-1}}$

25. Simplify. Write the answer with all variables in the denominator. $\left(\dfrac{5^0x^5y^{-2}}{5z^{-4}}\right)^{-2}\left(\dfrac{5x^5z^{-3}}{2y^{-4}}\right)$

26. Simplify. Write the answer with all exponents positive. $\left(\dfrac{2x^{-2}p^2}{y^{-4}}\right)^{-2}\left(\dfrac{y^2p^5}{x^3}\right)^{-5}$

27. Use six unit multipliers to convert 29 cubic meters to cubic inches.