acceleration, the initial velocity, and the initial height if the height at 1 second is 75 feet, the height at 2.5 seconds is 75 feet, and the height at 4 seconds is 3 feet.

EXERCISES

Solve each system of equations.

8. $x + 2y + 3z = 5$
$3x + 2y - 2z = -13$
$5x + 3y - z = -11$

9. $7x + 5y + z = 0$
$-x + 3y + 2z = 16$
$x - 6y - z = -18$

10. $x - 3z = 7$
$2x + y - 2z = 11$
$-x - 2y + 9z = 13$

11. $3x - 5y + z = 9$
$x - 3y - 2z = -8$
$5x - 6y + 3z = 15$

12. $8x - z = 4$
$y + z = 5$
$11x + y = 15$

13. $4x - 3y + 2z = 12$
$x + y - z = 3$
$-2x - 2y + 2z = 5$

14. $36x - 15y + 50z = -10$
$2x + 25y = 40$
$54x - 5y + 30z = -160$

15. $-x - 3y + z = 54$
$4x + 2y - 3z = -32$
$2y + 8z = 78$

16. $1.8x - z = 0.7$
$1.2y + z = -0.7$
$1.5x - 3y = 3$

17. If possible, find the solution of $y = x + 2z$, $z = -1 - 2x$, and $x = y - 14$.

18. What is the solution of $\frac{1}{8}x - \frac{2}{3}y + \frac{5}{6}z = -8$, $\frac{3}{4}x + \frac{1}{6}y - \frac{1}{3}z = -12$, and $\frac{3}{16}x - \frac{5}{8}y - \frac{7}{12}z = -25$? If there is no solution, write *impossible*.