Answer Key

Practice A

1. $(1, 1, 1)$ is a solution.   **2.** $(0, 3, 1)$ is a solution.   **3.** $(2, 1, 6)$ is *not* a solution.

4. $(3, 2, -1)$ **5.** $(4, -1, 3)$ **6.** $(3, -5, -4)$

7. $(-9, 4, 2)$ **8.** $(2, 2, 0)$ **9.** $(-1, 3, 2)$

10. $(1, 1, 3)$ **11.** $(2, 1, 4)$ **12.** $(-1, 0, 5)$

13. infinitely many solutions   **14.** no solutions

15. $(2, 1, 3)$ **16.** $x + y + z = 22$

$$3y + 4z = 54$$

$$x = z$$

17. Six are under age 5, 10 are ages 5–16, and 6 are ages 16 and up.