Lesson 2.4 Practice: Systems of Three Equations in Three Variables

School Launch · Algebra II · Unit 2: Linear Systems and Linear Programming · Worksheet A

Calculator for decimals

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Solve the system: $x + z = 2$; $x + 3z = 12$; $-3x - 2y + 2z = 9$. EASY

2. Solve the system: $-4x + 2z = -28$; $-x + 4y - 4z = 31$; $2y - 4z = 26$. EASY

3. Solve the system: $-3x + 4z = -19$; $x - 3y + z = -12$; $-x + 3z = -13$. EASY

4. Solve the system: $x + y - 2z = -1$; $4x - 4y + 3z = 17$; $-x + 2y - 2z = -7$. MEDIUM

5. Solve the system: $-x - 4y + 4z = -3$; $x + y - 2z = 1$; $4x - y - z = 8$. MEDIUM

6. Solve the system: $-x - 4y + z = -4$; $x + y + 2z = -8$; $-4x + y - 4z = 25$. MEDIUM

7. Solve the system: $2x + 3y + 4z = 14$; $-4x + 3y - 2z = -28$; $-2x + 4y + 2z = -10$. MEDIUM

8. Solve the system: $-2x - 3y - 4z = 25$; $x + 2y + z = -8$; $-3x - y - 3z = 19$. HARD

9. Solve the system: $-4x - y - 3z = -2$; $x + y + z = -4$; $x - 3y - 3z = 28$. HARD

10. Solve the system: $-3x - 4y - z = 23$; $-3x - 3y - 2z = 16$; $-x - 3y - z = 10$. HARD