

Key Vocabulary:

System of equations:

What does "solve" mean? What is a "solution" for a system?

Important Reminders:

- for $y = mx + b$, Y MUST BE BY ITSELF
- for standard form, $AX + BY = C$
- Substitution: need to get x or y by itself
- Elimination: need x, y, =, constants to line up
- Check: sub in to see if LS = RS

Test Outline: /35

Multiple Choice (5 marks – 1 per question) * NO CALCULATOR PERMITTED*

Written Response (30 marks – SHOW ALL WORK. REMEMBER UNITS.) *CALCULATOR ALLOWED*

*One MUST be solved by substitution; one MUST be solved by elimination; the rest you can choose.

Note: no "Communication" and no "Units, Rounding, Sentence Answers"

Topics Covered:

- 7.2 – Solving Systems by Graphing
- 7.4 – Solving Systems with Substitution
- 7.5 – Solving Systems with Elimination
- 7.6 – Properties of Systems (One solution? No solution? Infinite solutions?)
- 7.7/7.8 – Applications of Systems (using substitution or elimination to solve word problems)

- The equation of a line:

$$y = mx + b$$

$$Ax + By + C = 0$$

$$y - y_1 = m(x - x_1)$$

- The slope of a line:

$$m = \frac{\text{rise}}{\text{run}} = \frac{\Delta y}{\Delta x} = \frac{y_2 - y_1}{x_2 - x_1}$$