

Unit 2: Linear Equations and Systems

ADVANCED · SET 2

Name: _____ Date: _____

Solve each problem and give the exact answer. Show your work on a separate sheet; write only the final answer in the blank.

1. Solve for x: $5(2x - 3) - 4(x + 2) = 3(x - 1) + 10$

Answer: _____

2. Solve the system by substitution. Give (x, y): $y = 3x - 5$ and $2x + 4y = 22$

Answer: _____

3. Find the value of x where the lines $y = -2x + 17$ and $y = 3x - 8$ intersect (give x only).

Answer: _____

4. Solve for x: $0.25x + 1.5 = 0.4x - 0.9$

Answer: _____

5. A line passes through $(-2, 7)$ and $(4, -5)$. What is its slope?

Answer: _____

6. A line has equation $6x - 4y = 24$. What is the y-coordinate of its x-intercept... give the x-intercept's x-value.

Answer: _____

7. The sum of two numbers is 42 and their difference is 8. What is the larger number?

Answer: _____

8. Solve the system. Give (x, y): $x/2 + y/3 = 4$ and $x - y = 3$

Answer: _____