

Question 1 The system of equations below is linear.

$$\begin{cases} 2x + y^2 = 7 \\ -6x - 3.5y = 2 \end{cases}$$

Multiple Choice:

- (a) True
- (b) False ✓

Question 2 The system of equations below is linear.

$$\begin{cases} -4x + \pi = -y \\ 9x - 3 = 2 \end{cases}$$

Multiple Choice:

- (a) True ✓
- (b) False

Question 3 Which of the following is inconsistent?

Multiple Choice:

- (a) A system of linear equations with infinitely many solutions.
- (b) A system of linear equations with no solutions. ✓
- (c) A system of linear equations with exactly one unique solution.

Question 4 Write the following linear system as an augmented matrix.

$$\begin{cases} 3x + 2y = -1 \\ -5x - 4y = 0 \end{cases}$$

$$\left[\begin{array}{cc|c} \boxed{3} & \boxed{2} & \boxed{-1} \\ \boxed{-5} & \boxed{-4} & \boxed{0} \end{array} \right]$$