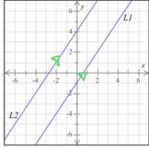
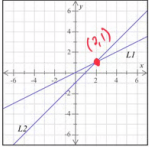
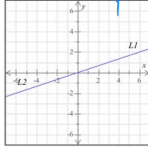


Algebra /

Classifying systems of linear equations from graphs

Classifying systems of linear equations from graphs

For each system of linear equations shown below, classify the system as "consistent dependent," "consistent independent," or "inconsistent." Then, choose the best description of its solution. If the system has exactly one solution, give its solution.

System A	System B	System C
Line 1: $y = \frac{3}{2}x - 1$ Line 2: $y = \frac{3}{2}x + 4$ <i>parallel near each other</i> 	Line 1: $y = \frac{1}{2}x$ <i>$1 = \frac{1}{2}(2) \quad 1 = 1$</i> Line 2: $y = x - 1$ <i>$1 = 2 - 1 \quad 1 = 1$</i> 	Line 1: $y = \frac{1}{3}x$ <i>same line</i> Line 2: $-x + 3y = 0$ <i>$3y = x \quad y = \frac{1}{3}x$</i> 
This system of equations is: ☒ inconsistent ☐ consistent dependent ☐ consistent independent	This system of equations is: ☐ inconsistent ☐ consistent dependent ☒ consistent independent	This system of equations is: ☐ inconsistent ☒ consistent dependent ☐ consistent independent
This means the system has: ☐ a unique solution Solution: ☐ infinitely many solutions ☒ no solution	This means the system has: ☒ a unique solution Solution: ☐ infinitely many solutions ☐ no solution	This means the system has: ☐ a unique solution Solution: ☒ infinitely many solutions ☐ no solution