



Line #: 74449 / 82588 .

ID : \_\_\_\_\_

Name : \_\_\_\_\_

([I] continued)

(4) When  $ad - bc = 0$ , the system of linear equations

$$\begin{aligned}ax + by &= e, \\cx + dy &= f\end{aligned}$$

has no solution,       has infinitely many solutions,

has either no solution or infinitely many solutions

(Check one).

For example, the system

$$\begin{aligned}2x + y &= 1, \\10x + 5y &= 1\end{aligned}$$

has no solution,       has infinitely many solutions

$$(x, y) = ( \underline{\hspace{2cm}}, \underline{\hspace{2cm}} )$$

(Check one),

whereas the system

$$\begin{aligned}2x + y &= 1, \\10x + 5y &= 5\end{aligned}$$

has no solution,       has infinitely many solutions

$$(x, y) = ( \underline{\hspace{2cm}}, \underline{\hspace{2cm}} )$$

(Check one).