Systems of Equations

A) Determine whether the ordered pair is a solution to the given system of equations.

1) $(-7, 8)$; $\begin{aligned} -7b &= -77 - 3a \\ 5a + 2b + 19 &= 0 \end{aligned}$

2) $(0, 6)$; $\begin{aligned} -9 &= p + 2q \\ 9p - 8q &= 54 \end{aligned}$

3) $(5, 4)$; $\begin{aligned} -8s + 5t &= 20 \\ 4t - 7s &= 13 \end{aligned}$

4) $(3, -1)$; $\begin{aligned} 9d - 8c &= -33 \\ 6c - 3d &= 21 \end{aligned}$

B) 1) Check whether $(2, 8)$ is a solution to the systems of linear equations.

a) $\begin{aligned} 7u - 6v &= 38 \\ 16 &= -4u + v \end{aligned}$

b) $\begin{aligned} -3x + 54 &= 6y \\ -2x + 60 &= 7y \end{aligned}$

2) Check whether $(-5, 7)$ is a solution to the systems of linear equations.

a) $\begin{aligned} -5m + 7n &= 74 \\ m - 5n &= -40 \end{aligned}$

b) $\begin{aligned} 3r &= -22 + 5s \\ -2s - 9r &= 47 \end{aligned}$