

**Answer on Question #75672 – Math – Algebra**

**Question**

$$\begin{aligned}3p + 2q &= 5 \\ q - p &= 5\end{aligned}$$

**Solution**

$$\begin{aligned}&\begin{cases} 3p + 2q = 5 \\ q - p = 5 \quad | \cdot 3 \end{cases} \\ \begin{cases} 3p + 2q = 5 \\ 3q - 3p = 15 \end{cases} & \quad + \rightarrow \quad 5q = 20 \rightarrow q = 4\end{aligned}$$

$$\begin{aligned}&\begin{cases} 3p + 2q = 5 \\ q - p = 5 \quad | \cdot 2 \end{cases} \\ \begin{cases} 3p + 2q = 5 \\ 2q - 2p = 10 \end{cases} & \quad - \rightarrow \quad 5p = -5 \rightarrow p = -1\end{aligned}$$

**Answer:**

$$p = -1$$

$$q = 4$$