Question

$$3p + 2q = 5$$
$$q - p = 5$$

Solution

$$\begin{cases} 3p + 2q = 5 \\ q - p = 5 \quad | \cdot 3 \end{cases}$$

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

$$\begin{cases} 3p + 2q = 5 \\ q - p = 5 \quad | \cdot 2 \end{cases}$$

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

Answer:

$$p = -1$$

$$q = 4$$