

$$\begin{array}{r} 1 \ A \\ \times \ A \\ \hline 9 \ A \end{array}$$

$\therefore A \times A = A$  or a no. whose ones digit is A

$$\therefore A = 1, 5, 6, 0$$

$$A \neq 0$$

$$A \neq 1$$

$$A \neq 5$$

$$\therefore \begin{array}{r} 1 \ 0 \\ \times \ 0 \\ \hline 0 \ 0 \end{array}$$

$$\therefore \begin{array}{r} 1 \ 1 \\ \times \ 1 \\ \hline 1 \ 1 \end{array}$$

$$\therefore \begin{array}{r} 1 \ 5 \\ \times \ 5 \\ \hline 7 \ 5 \end{array}$$

$$\begin{array}{r} 1 \ 6 \\ \times \ 6 \\ \hline 9 \ 6 \end{array}$$

$$\therefore A = 6$$

$$\textcircled{4} \begin{array}{r} A \ B \\ + \ 3 \ 7 \\ \hline 6 \ A \end{array}$$

$$1. \ A + 3 = 6 \quad \text{or} \quad 1 + A + 3 = 6$$

$$\Rightarrow A = 3 \quad \Rightarrow A = 2$$

$$2. \ B + 7 \neq 3 \quad B + 7 = 12$$

$$\Rightarrow B = 5$$

$$\begin{array}{r} 2 \ 5 \\ + \ 3 \ 7 \\ \hline 6 \ 2 \end{array}$$

$$\therefore A = 2, B = 5$$