

Exercise 5(B)

$$\begin{array}{r} 3A \\ + 25 \\ \hline B2 \end{array}$$

~~$A = 5 + 2 = 7$~~ $A = 7$ as $7 + 5 = 12$

we want 2 at units place and 1 carry is over.

$$\text{Now } 3 + 2 + 1 = 6$$

$$B = 6$$

Hence $A = 7$ and $B = 6$

$$\begin{array}{r} 37 \\ + 25 \\ \hline 62 \end{array}$$

$$\begin{array}{r} 98 \\ + 4A \\ \hline CB3 \end{array}$$

$A = 5$ as $8 + B = 13$

We want 3 at units place and 1 carry is over.

Hence, $A = 5$, ~~$B = 4$~~ $B = 5$, $C = 1$

$$\begin{array}{r} 98 \\ + 45 \\ \hline 143 \end{array}$$

$$\begin{array}{r} A1 \\ + 1B \\ \hline B0 \end{array}$$

3) $B=9$ as $9+9=10$

We want 0 at its units place and 1 carry is over.

~~$B=9$~~ Hence, $A=7$ and $B=9$

$$\begin{array}{r} 71 \\ + 19 \\ \hline 90 \end{array}$$

$$\begin{array}{r} 4) \quad 2AB \\ + AB1 \\ \hline B18 \end{array}$$

$B=7$ as $7+1=8$
We want 8 at unit place.

Now,

$$7 + A = 11$$

$$\therefore A = 11 - 7 = 4$$

Hence $A=4$ and $B=7$

$$\begin{array}{r} 247 \\ + 471 \\ \hline 718 \end{array}$$

$$\begin{array}{r}
 5) \quad 12A \\
 + 6AB \\
 \hline
 A09
 \end{array}$$

$$\begin{aligned}
 A + B &= 9 \\
 \text{and } 2 + A &= 10
 \end{aligned}$$

$$\begin{aligned}
 \therefore A &= 10 - 2 = 8 \\
 \text{and } 8 + B &= 9 \\
 \therefore B &= 9 - 8 = 1
 \end{aligned}$$

Hence $A=8$ and $B=1$

$$\begin{array}{r}
 128 \\
 + 681 \\
 \hline
 809
 \end{array}$$

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

We need A at unit place and 9 at ten's place,
 $A=6$ as $6 \times 6 = 36$

$$\begin{array}{r}
 16 \\
 \times 6 \\
 \hline
 96
 \end{array}$$

$$\begin{array}{r} 7) \quad AB \\ \quad \times 6 \\ \hline BBB \end{array}$$

$\therefore B = 4$ as $6 \times 4 = 24$

We want to find A, $6 \times A + 2 = 4$

$\therefore A = 7$

$$\begin{array}{r} 74 \\ \times 6 \\ \hline 444 \end{array}$$

$$\begin{array}{r} 8) \quad AB \\ \quad \times 3 \\ \hline CAB \end{array}$$

$\therefore B = 0$ as $3 \times 0 = 0$

We want to find A, $3 \times A = A$

$\therefore A = 5$ as $3 \times 5 = 15$

$\therefore C = 1$

$$\begin{array}{r} 50 \\ \times 3 \\ \hline 150 \end{array}$$

$$\begin{array}{r} 9) \quad AB \\ \times 5 \\ \hline CAB \end{array}$$

$$B=0 \text{ as } 5 \times 0 = 0$$

we want to find A, $5 \times A = A$

$$\therefore A=5, \text{ as } 5 \times 5 = 25$$

$$\therefore C=2$$

$$\begin{array}{r} 50 \\ \times 5 \\ \hline 250 \end{array}$$

$$\begin{array}{r} 10) \quad 8A5 \\ + 94A \\ \hline 1A33 \end{array}$$

$$5 + A = 13$$

$$\text{and } A + 4 = 13$$

$$\therefore A = 13 - 5 = 8$$

$$\text{Hence } A = 8$$

$$\begin{array}{r} 885 \\ + 948 \\ \hline 1833 \end{array}$$

11)

$$\begin{array}{r} 6AB5 \\ + D58C \\ \hline 9351 \end{array}$$

$$C + 5 = 11$$

$$\therefore C = 11 - 5 = 6$$

$$\text{and } 8 + B + 1 = 15$$

$$\therefore B = 15 - 9 = 6$$

$$\text{and } A + 5 + 1 = 13$$

$$\therefore A = 13 - 6 = 7$$

$$\text{and } 6 + D + 1 = 9$$

$$\therefore D = 9 - 7 = 2$$

Hence $A = 7$, $B = 6$, $C = 6$ and $D = 2$

$$\begin{array}{r} 6765 \\ + 2586 \\ \hline 9351 \end{array}$$