

## 4. PLAYING WITH NUMBERS

EX: 4.1 P.NO: 47

1. write the numbers in general forms

a) 75

$$75 = 70 + 5 = 10 \times 7 + 5$$

b) 89

$$89 = 80 + 9 = 10 \times 8 + 9$$

2. write in standard forms

a)  $10 \times 5 + 1$ 

$$10 \times 5 + 1 = 50 + 1 = 51$$

b)  $10 \times 7 + 8$ 

$$10 \times 7 + 8 = 70 + 8 = 78$$

3. Find the unknown values

a)  $\begin{array}{r} 9 \ A \\ + \ B \ 7 \\ \hline C \ B \ 2 \end{array}$ 

soln:  $A + 7 = \textcircled{1} 2$

$A = 5$

$\textcircled{1} + 9 + B = \textcircled{1} 3$

$B = 3$

so,  $C = 1$ b)  $\begin{array}{r} 2 \ A \\ \times \ 7 \\ \hline B \ 2 \end{array}$ 

soln:  $A \times 7 = 2$

$\therefore 6 \times 7 = \textcircled{4} 2$

 $\textcircled{4}$  $2 \ \textcircled{6}$ 

$$\begin{array}{r} \times \ 7 \\ \hline 18 \ 2 \end{array}$$

4  $A \times C \times A C = C C C$

$\therefore A = 3 \quad C = 7$

$3 \times 7 \times 37 = 3 \times 259 = 777$

5 write the next two numbers

b) 1, 3, 7, 15, 31, 63

$$\left. \begin{array}{l} 3 - 1 = 2 \\ 7 - 3 = 4 \\ 15 - 7 = 8 \end{array} \right\} \begin{array}{l} 2 \times 2 = 4 \\ 4 \times 2 = 8 \end{array}$$

Hence  $8 \times 2 = 16$ ,  $16 \times 2 = 32$

next no:  $15 + 16 = \underline{31}$

Next no:  $31 + 32 = \underline{63}$

6 The sum of the digits of a 2-digit number is 6. If the digits of the numbers are reversed, the new number is decreased by 36. Find the number  
consider

2<sup>nd</sup> digit number =  $AB$

$A + B = 6$

new number is decreased so  $A > B$

may be  $A = 4$  or  $5$

$A = 5$	$B = 1$	$B = 2$ or $1$	$A = B$
$\underline{5}$	$\underline{1}$		$\underline{3}$ $\underline{6}$
51			$B = A$
$\underline{-36}$			
15			

Complete the chapter 4 in your class work copy.