

Sub:Maths class-6 Topic- Patterns in whole numbers.

Do all questions of Ex-2.6,one of each type is done for you.

**EXERCISE 2.6**

Use Cordova Smart Class Software on the smart board in class to do Exercise.

1. Observe the following pattern and fill in the blanks :

$1 \times 1$	=	1
$11 \times 11$	=	121
$111 \times 111$	=	12321
$1111 \times 1111$	=	.....
$11111 \times 11111$	=	.....

2. Observe the following pattern and extend it to four more steps :

$(7 \times 2)$	-	3	=	11
$(7 \times 3)$	-	6	=	15
$(7 \times 4)$	-	9	=	19
$(7 \times 5)$	-	12	=	23

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3. Observe the following pattern :

$$8 \times 1 + 1 = 9$$

$$8 \times 3 + 1 = 25$$

$$8 \times 6 + 1 = 49$$

$$8 \times 10 + 1 = 81$$

Write three more steps.

4. Study the following pattern and write next three steps :

$$1 \times 8 + 1 = 9$$

$$12 \times 8 + 2 = 98$$

$$123 \times 8 + 3 = 987$$

Ex. 2-6.



### Puzzle

Using four 4s, mathematical operations  $+$ ,  $-$ ,  $\times$ ,  $\div$  and brackets create the numbers 0, 1, 2 and 3.

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Exercise - 2.6  
PATTERNS IN WHOLE NUMBERS?

1. Observe the following pattern and fill in the blanks:-

$$\begin{aligned} 1 \times 1 &= 1 \\ 11 \times 11 &= 121 \\ 111 \times 111 &= 12321 \\ \underline{1111} \times \underline{1111} &= \underline{1234321} \\ \underline{11111} \times \underline{11111} &= \underline{123454321} \end{aligned}$$

2. Observe the following pattern and extend it to four more steps?

$$\begin{aligned} (7 \times 2) - 3 &= 11 \\ (7 \times 3) - 6 &= 15 \\ (7 \times 4) - 9 &= 19 \\ (7 \times 5) - 12 &= 23 \\ (7 \times 6) - 15 &= 27 \\ (7 \times 7) - 18 &= 31 \\ (7 \times 8) - 21 &= 35 \\ (7 \times 9) - 24 &= 39 \end{aligned}$$

