

Multiplication by a 2-digit number

a) 5986 x 42

			Th	H	T	O
			³	³	²	
			¹	¹	¹	
			5	9	8	6
				X	4	2
<hr/>						
		1	1	9	7	2
+	2	3	9	4	4	0
<hr/>						
	2	5	1	4	1	2

Product = 2,51,412

b) 9764 X 29

			TTh	Th	H	T	O
				¹	¹		
				⁶	⁵	³	
				9	7	6	4
					X	2	9
<hr/>							
		8	7	8	7	6	
+	1	9	5	2	8	0	
<hr/>							
	2	8	3	1	5	6	

Product = 2,83,156

c) 8645 x 38

			Th	H	T	O
			¹	¹	¹	
			⁵	³	⁴	
			8	6	4	5
				X	3	8
<hr/>						
	¹	¹		¹		
		6	9	1	6	0
+	2	5	9	3	5	0
<hr/>						
	3	2	8	5	1	0

Product=3,28,510

d) 9307 x 17

			Th	H	T	O
			²		⁴	
			9	3	0	7
				X	1	7
<hr/>						
		6	5	¹	4	9
+	9	3	0	7	0	
<hr/>						
	1	5	8	2	1	9

Product=1,58,219

e) 4876x 92

			Th	H	T	O
			⁷	⁶	⁵	
			¹	¹	¹	
			4	8	7	6
				X	9	2
<hr/>						
		¹	9 ¹	7	5	2
+	4	3	8	8	4	0
<hr/>						
	4	4	8	5	9	2

Product=4,48,592

22-4-20

Multiplication by a 3-digit number

a) 9752 x 372

			TTh	Th	H	T	O
				5 1	3 1	1	
				9	7	5	2
				X	3	7	2
	1	1	1	1			
				1	9	5	0
				6	8	2	6
				8	2	6	4
				2	6	4	0
+	2	9	2	5	6	0	0
	3	6	2	7	7	4	4

Product = 36,27,744

c) 4724 x 466

			TTh	Th	H	T	O
				2 4 4	1 1	1 2 2	
				4	7	2	4
				X	4	6	6
	1	2	2	1			
				2	8	3	4
				2	8	3	4
				8	3	4	4
				3	4	4	0
+	1	8	8	9	6	0	0
	2	2	0	1	3	8	4

Product = 22,01,384

b) 2312x645

			TTh	Th	H	T	O
				1 1 1		1 1	
				2	3	1	2
				X	6	4	5
				1	1	1	1
				1	1	5	6
				9	2	4	8
				2	4	8	0
+	1	3	8	7	2	0	0
	1	4	9	1	2	4	0

Product = 14,91,240

d) 5625x635 (HW 22-4-20)

			TTh	Th	H	T	O
				3 1 3	1 1	3 1 2	
				5	6	2	5
				X	6	3	5
				1	2		
				2	8	1	2
				1	6	8	7
				6	8	7	5
				8	7	5	0
+	3	3	7	5	0	0	0
	3	5	7	1	8	7	5

Product = 35,71,875

23-4-2020

Multiplication by 3 digit numbers

Multiplying with zeros in the factors

a) 403 X 809

	L	TTh	Th	H	T	O
					2	
					2	
				4	0	3
			X	8	0	9
<hr/>						
			1			
			3	6	2	7
			0	0	0	0
+	3	2	2	4	0	0
<hr/>						
	3	2	6	0	2	7

Product = 3,26,027

Answers of HW given on (23-4-20)

c) 4010 X 506

	TL	L	TTh	Th	H	T	O
				4	0	1	0
				X	5	0	6
<hr/>							
			2	4	0	6	0
			0	0	0	0	0
+	2	0	0	5	0	0	0
<hr/>							
	2	0	2	9	0	6	0

Product=20,29,060

b) 5983 X 604

	TL	L	TTh	Th	H	T	O
				5	4	1	
				3	3	1	
				5	9	8	3
				X	6	0	4
<hr/>							
		1	1	1			
			2	3	9	3	2
			0	0	0	0	0
+	3	5	8	9	8	0	0
<hr/>							
	3	6	1	3	7	3	2

Product = 36,13,732

d) 60005 x 908

			L	TTh	Th	H	T	O
							4	
							4	
				6	0	0	0	5
					X	9	0	8
<hr/>								
			4	8	0	0	4	0
			0	0	0	0	0	0
+	5	4	0	0	4	5	0	0
<hr/>								
	5	4	4	8	4	5	4	0

Product=5,44,84,540

2) Calculate. Only will you see the patterns.
then fill in a according to the patterns.

a) $13 \times 11 =$

b) $131 \times 111 =$

c) $131 \times 1111 =$

d) $131 \times 11111 =$

e) $131 \times 111111 =$

b) $1 \times 9 + 2$

$9 + 2 = 11$

$\rightarrow 12 \times 9 + 3 =$

$108 + 3 =$

111

$\rightarrow 123 \times 9 + 4$

$1,107 + 4$

$1,111$

$\rightarrow 1234 \times 9 + 5$

\downarrow

$11,106 + 5$

$11,111$

$\rightarrow 12345 \times 9 + 6$

\downarrow

$111,105 + 6$

$111,111$

c) 101×33

101

$\times 33$

$303 \rightarrow 3$

$303 \times \rightarrow 30$

$3,3,33$

next questions in Home work

d) 101×22

$$\begin{array}{r}
 101 \\
 \times 22 \\
 \hline
 202 \\
 202 \times \\
 \hline
 \underline{2,2,22}
 \end{array}$$

$\rightarrow 101 \times 222$

$$\begin{array}{r}
 101 \\
 \times 222 \\
 \hline
 202 \\
 202 \times \\
 202 \times \times \\
 \hline
 \underline{2,24,22}
 \end{array}$$

$\rightarrow 101 \times 2222$

$$\begin{array}{r}
 \times 101 \\
 2222 \\
 \hline
 202 \\
 202 \times \\
 202 \times \times \\
 202 \times \times \times \\
 \hline
 \underline{224422}
 \end{array}$$

$\rightarrow 101 \times 22222 \rightarrow$

$$\begin{array}{r}
 \times 101 \\
 22222 \\
 \hline
 202 \\
 202 \times \\
 202 \times \downarrow \\
 202 \times \downarrow \\
 202 \times \downarrow \\
 202 \times \downarrow \\
 \hline
 \underline{2244422}
 \end{array}$$