ST. LAWRENCE HIGH SCHOOL

## A JESUIT CHRISTIAN MINORITY INSTITUTION

1. Write the first five multiples of the following:
a) $4 \rightarrow 4,8,12,16,20$
b) $10 \rightarrow \mathbf{1 0}, \mathbf{2 0}, \mathbf{3 0}, \mathbf{4 0}, \mathbf{5 0}$
c) $8 \rightarrow 8,16,24,32,40$
d) $2 \rightarrow 2,4,6,8,10$
e) $12 \rightarrow \mathbf{1 2}, \mathbf{2 4}, \mathbf{3 6}, \mathbf{4 8}, \mathbf{6 0}$
2. Find the multiples of:
a) 6 which are less than $30 \rightarrow \mathbf{6 , 1 2 , 1 8}, \mathbf{2 4}$
b) 5 which are less than $40 \rightarrow 5,10,15,20,25,30,35$
c) 9 which are less than $50 \longrightarrow 9,18,27,36,45$
d) 11 which are less than $80 \rightarrow \mathbf{1 1}, \mathbf{2 2}, \mathbf{3 3}, 44,55,66,77$
e) 13 which are less than $70 \rightarrow \mathbf{1 3}, \mathbf{2 6}, \mathbf{3 9}, \mathbf{5 2}, 65$
3. a) Check if 1000 is a multiple of 50

Let us divide 1000 by 50

$$
\begin{gathered}
20 \\
\begin{array}{c}
1000 \\
\frac{-100}{0}
\end{array}
\end{gathered}
$$

Ans. The remainder is 0 .
Thus, we can say that 1000 is a multiple of 50.
b) Check if 144 is a multiple of 8

Let us divide 144 by 8

$$
\begin{array}{r}
18 \\
\begin{array}{r}
144 \\
-8 \\
\hline 64 \\
-64 \\
\hline 0
\end{array}
\end{array}
$$

Ans. The remainder is 0 .
Thus, we can say that 144 is a multiple of 8 .
c) Check if 824 is a multiple of 9

Let us divide 824 by 9

$$
\begin{aligned}
& \begin{array}{c}
91 \\
9 \longdiv { 8 2 4 }
\end{array} \\
& \frac{-81}{14} \\
& \begin{array}{r}
-9 \\
\hline 5
\end{array}
\end{aligned}
$$

Ans. Since 824 is not completely divisible by 9, it is not a multiple of 9.
d) Check if 525 is a multiple of 25

Let us divide 525 by 25

$$
\begin{aligned}
& \begin{array}{r}
21 \\
2 5 \longdiv { 5 2 5 }
\end{array} \\
& \frac{-50}{25} \\
& \begin{array}{r}
-25 \\
0
\end{array}
\end{aligned}
$$

Ans. The remainder is 0 .
Thus, we can say that 525 is a multiple of 25.
4. Write the first six multiples of 2 and 3 and underline the common multiples.

Multiples of 2 are $-2,4, \underline{6}, 8,10, \underline{12}$
Multiples of 3 are - 3, $\underline{6}, 9, \underline{\mathbf{1 2}}, 15,18$

Ans. The common multiples of 2 and 3 are 6 and 12.
5. Write the first nine multiples of 3 and 6 and underline the common multiples.

Multiples of 3 are $-3, \underline{\mathbf{6}}, 9, \underline{\mathbf{1 2}}, 15, \underline{\mathbf{1 8}}, 21, \underline{\mathbf{2 4}}, 27$
Multiples of 6 are - $\underline{6}, \underline{\mathbf{1 2}}, \underline{18}, \underline{\mathbf{2 4}}, 30,36,42,48,54$

Ans. The common multiples of 3 and 6 are $6,12,18$ and 24.
6. Find the common multiples of 10 and 15.

Multiples of 10 are - 10, 20, $\underline{\mathbf{3 0}}, 40,50, \underline{60}, 70,80, \underline{90}, 100$
Multiples of 15 are $-15, \underline{\mathbf{3 0}}, 45, \underline{\mathbf{6 0}}, 75, \underline{\mathbf{9 0}}, 105$

Ans. The common multiples of 10 and 15 are $\mathbf{3 0 , 6 0}$ and 90.
7. Find the L.C.M. by listing their multiples.
a) 8,12

Multiples of 8 are $-8,16, \underline{24}, 32,40, \underline{48}$
Multiples of 12 are $-12, \underline{24}, 36, \underline{48}$
The common multiples of 8 and 12 are 24 and 48
So, the L.C.M. of 8 and 12 is $\underline{24}$.
b) $5,10,16$

Multiples of 5 are $-5,10,15,20,25,30,35,40,45,50,55,60,65,70,75, \underline{80}$ Multiples of 10 are $-10,20,30,40,50,60,70, \underline{80}$
Multiples of 16 are $-16,32,48,64, \underline{80}$

So, the L.C.M. of 5, 10 and 16 is $\mathbf{8 0}$.
c) $3,7,21$

Multiples of 3 are $-3,6,9,12,15,18, \underline{21}, 24$
Multiples of 7 are - 7, 14, 21, 28, 35
Multiples of 21 are - 21, 42

So, the L.C.M. of 3,7 and 21 is $\underline{21}$.

