Find GCF using Euclidean Algorithm Worksheets

1. Use the Euclidean Algorithm to find the GCF of 96 and 144.

2. Use the Euclidean Algorithm to find the GCF of 12 and 78.

3. Use the Euclidean Algorithm to find the GCF of 660 and 840.

Find GCF using Euclidean Algorithm Worksheets

1. Use the Euclidean Algorithm to find the GCF of 96 and 144.
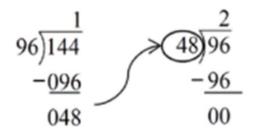
$$
\begin{array}{r}
1 \\
96\overline{)144} \\
-096 \\
\hline
048
\end{array}
\qquad
\begin{array}{r}
2 \\
48\overline{)96} \\
-96 \\
\hline
00
\end{array}
$$
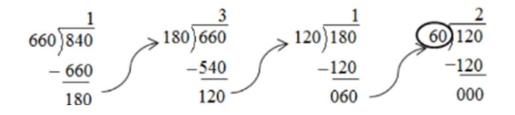
The GCF is 48, which is the final divisor when the remainder is 0.

2. Use the Euclidean Algorithm to find the GCF of 12 and 78.

$$
\begin{array}{r}
6 \\
12\overline{)78} \\
-72 \\
\hline
06
\end{array}
\qquad
\begin{array}{r}
2 \\
6\overline{)12} \\
-12 \\
\hline
00
\end{array}
$$

The GCF is 66, which is the final divisor when the remainder is 0.

3. Use the Euclidean Algorithm to find the GCF of 660 and 840.

$$
\begin{array}{r}
1 \\
660\overline{)840} \\
-660 \\
\hline
180
\end{array}
\quad
\begin{array}{r}
3 \\
180\overline{)660} \\
-540 \\
\hline
120
\end{array}
\quad
\begin{array}{r}
1 \\
120\overline{)180} \\
-120 \\
\hline
060
\end{array}
\quad
\begin{array}{r}
2 \\
60\overline{)120} \\
-120 \\
\hline
000
\end{array}
$$

The GCF is 60, which is the final divisor when the remainder is 0.