

Utility Industry Math Boot Camp

Mathematics Manual

Subtracting feet, inches and fractions of inches

$$11' - 01\frac{1}{64}'' - 10' - 11\frac{31}{32}'' =$$

Step 1: Create common denominators.

$$\begin{array}{r} 11' - 01\frac{1}{64}'' = 11' - 01\frac{1}{64}'' \\ - 10' - 11\frac{31}{32}'' = 10' - 11\frac{62}{64}'' \\ \hline \end{array}$$

Step 2:

Borrow (feet).

$$1' = 12''$$

$$\begin{array}{r} 11' - 01\frac{1}{64}'' = 10' - 13\frac{1}{64}'' \\ - 10' - 11\frac{62}{64}'' = 10' - 11\frac{62}{64}'' \\ \hline \end{array}$$

Step 3: Borrow (whole inches).

$$1'' = \frac{64}{64}''$$

$$\begin{array}{r} 10' - 13\frac{1}{64}'' = 10' - 12\frac{65}{64}'' \\ - 10' - 11\frac{62}{64}'' = 10' - 11\frac{62}{64}'' \\ \hline \end{array}$$

Step 4:

Subtract.

$$\begin{array}{r} 10' - 12\frac{65}{64}'' \\ - 10' - 11\frac{62}{64}'' \\ \hline 00' - 01\frac{3}{64}'' \end{array}$$

$$11' - 01\frac{1}{64}'' - 10' - 11\frac{31}{32}'' = 00' - 01\frac{3}{64}''$$