Appetizer Series #1: Unit Conversion
4/18/2012

LEGEND
T (TONS), CF (CUBIC FOOT), CY (CUBIC YARD)

KNOWN
1 CY = 1.6 T
1 CY = 27 CF

PROBLEM
CONVERT 300 CF INTO TONS OF GRAVEL.

CONVERSIONS CAN BE WRITTEN EITHER WAY; RIGHT SIDE UP OR UPSIDE DOWN.

\[
\frac{1 \text{ CY}}{1.6 \text{ T}} = \frac{1.6 \text{ T}}{1 \text{ CY}}
\]

\[
\frac{1 \text{ CY}}{27 \text{ CF}} = \frac{27 \text{ CF}}{1 \text{ CY}}
\]

GRID

300 CF

PLACE WHAT YOU ARE CONVERTING IN THE TOP LEFT CELL

300 CF | 1 CY
27 CF

CHOOSE THE CONVERSION WITH THE SAME UNITS YOU ARE CONVERTING FROM, ON BOTTOM IN THE SECOND COLUMN.

300 CF | 1 CY | 1.6 T
27 CF | 1 CY

MAKE THIRD COLUMN UNITS OPPOSITE THE SECOND

300 CF | 1 CY | 1.6 T
27 CF | 1 CY

CANCEL LIKE UNITS (ONE TO ONE)
YOU'RE GOOD AS LONG AS YOU ARE ONLY LEFT WITH UNITS YOU ARE CONVERTING TO (T) ON TOP

300 X 1.6 T
27

PROCESS

\[
\frac{480}{27} = 17.8 \text{ T}
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