

# Appetizer Series #1: Unit Conversion

4/18/2012

## LEGEND

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

## KNOWN

$$1 \text{ CY} = 1.6 \text{ T}$$

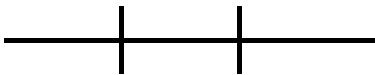
$$1 \text{ CY} = 27 \text{ CF}$$

PROBLEM CONVERT 300 CF INTO TONS OF GRAVEL.

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

$$\frac{1 \text{ CY}}{1.6 \text{ T}} = \frac{1.6 \text{ T}}{1 \text{ CY}}$$

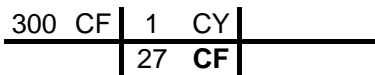
$$\frac{1 \text{ CY}}{27 \text{ CF}} = \frac{27 \text{ CF}}{1 \text{ CY}}$$



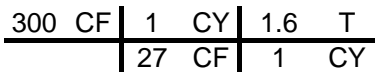
GRID



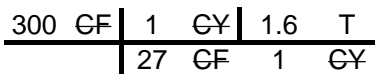
PLACE WHAT YOU ARE CONVERTING IN THE TOP LEFT CELL



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



MAKE THIRD COLUMN UNITS OPPOSITE THE SECOND



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

$$\frac{300 \times 1.6 \text{ T}}{27}$$

$$480 \div 27 = 17.8 \text{ T}$$

PROCESS