1. Use dimensional analysis to carry out the indicated conversions. Report the answers to the proper number of significant figures.

**Simple Conversions (Ex. Set 2A pg. 43):**

386.2 cm = ? yd

2.35 tons = ? oz

4.6382 lb = ? g

2.50 gal = ? L

**Metric Conversions (Ex. Set 2B pg. 45):**

4113 m = ? km

1.73 g = ? mg

4.732\times10^{-5} \text{ mg} = ? \text{ kg}

1.32\times10^{6} \text{ kL} = ? \text{ cL}
Complex Conversions (Ex. Set 2C pg. 48):

5.2 mi\(^2\) = ? cm\(^2\)

3.75 mi/hr = ? ft/sec

432.5 oz/ft\(^2\) = ? g/cm\(^2\)

8.6 \times 10^{-3} \text{ lb/ft}^3 = ? \text{ kg/km}^3

2. Carry out the indicated temperature conversions. Round your answer to the same number of decimal places as the original temperature.

\(\text{F} \rightarrow \text{C}, \: \text{C} \rightarrow \text{K} \: \text{and} \: \text{F} \rightarrow \text{K} \) (Ex. Sets 2D and 2F pgs. 52 and 55):

118.22 \(\text{C} = ? \text{F}\)

98.6 \(\text{F} = ? \text{C}\)

-150. \(\text{C} = ? \text{K}\)

55 \(\text{K} = ? \text{C}\)

-14.18 \(\text{F} = ? \text{K}\)

563.2 \(\text{K} = ? \text{F}\)