

# Volume Conversion Quiz

Name KEY

Use the following conversions for this worksheet:

$$1 \text{ U.S. quart (qt)} = 0.946 \text{ Liter (L)}$$

$$1 \text{ quarts} = 2 \text{ pints}$$

$$1 \text{ L} = 1.06 \text{ qt}$$

$$1 \text{ in}^3 = 16.387 \text{ cm}^3$$

$$1 \text{ gallon} = 3.79 \text{ L}$$

$$1 \text{ Liter} = 61.024 \text{ in}^3$$

$$1 \text{ gallon} = 4 \text{ quarts}$$

1) A 502 in<sup>3</sup> engine in how many liters?

$$\frac{502 \text{ in}^3}{61.024 \text{ in}^3} \times \frac{1 \text{ L}}{1} = 8.23 \text{ L}$$

2) 8 qt = \_\_\_\_\_ L

$$\frac{8 \text{ qt}}{1.06 \text{ qt}} \times \frac{1 \text{ L}}{1} = 7.55 \text{ L}$$

3) 4cc = \_\_\_\_\_ in<sup>3</sup>

$$\frac{4 \text{ cc}}{16.387 \text{ cm}^3} \times \frac{1 \text{ in}^3}{1} = 0.244 \text{ in}^3$$

4) 18 liters = \_\_\_\_\_ pints

$$\frac{18 \text{ L}}{1 \text{ L}} \times \frac{1.06 \text{ qt}}{1} \times \frac{2 \text{ pts}}{1 \text{ qt}} = 38.16 \text{ pts}$$

5) 8 gallons = \_\_\_\_\_ in<sup>3</sup>

$$\frac{8 \text{ gallon}}{1 \text{ gallon}} \times \frac{3.79 \text{ L}}{1} \times \frac{61.024 \text{ in}^3}{1 \text{ L}} = 1850.25 \text{ in}^3$$