## 15) Unit Conversions

| Regular Problems | 15.9      | 20 L                    |
|------------------|-----------|-------------------------|
| 15.1 102 yds     | 15.10     | 0.00077 lbs             |
| 15.2 5.7 lbs     | Ratios, s | quares, and cubes       |
| 15.3 3.6 cups    | 15.11     | $1900 \text{ in}^2$     |
| 15.4 3.7 m       | 15.12     | $0.000068 \text{ m}^3$  |
| 15.5 19 gal      | 15.13     | 1120 ft/s               |
| 15.6 2 oz        | 15.14     | $10300 \text{ kg/m}^2$  |
| 15.7 212,600 m   | n 15.15   | 1190 lb/ft <sup>3</sup> |
| 15.8 27,500 s    | 15.16     | 16 km/L                 |

Convert 305 feet (height of the Statue of Liberty) to yards.

15.1

Convert 91 ounces (weight of the largest ostrich egg) to pounds.

Convert 29 ounces (daily consumption by a typical coffee drinker) to cups.

15.3

| Convert 12 feet (typical width of a highway lane) to meters.     | Convert 72 liters (typical minivan gas tank capactiy) to gallons. |
|--|---|
| Convert 50 grams (weight of a typical toaster pastry) to ounces. | Convert 132.1 miles (length of interstate 476) to meters.         |

| Convert 7.65 hours (driving |
|-----------------------------|
|                             |
| time from Washington DC to  |
| Boston) to seconds.         |
|                             |

Convert 40 pints (typical yearly American ice cream consumption) to liters.

15.8

Convert 350 milligrams (sodium content of large fries) to pounds.

Convert 13 square feet (area of typical office desk) to square inches.

15.11

15.10

Convert 68 cubic centimeters (volume of a typical egg) to cubic meters.

Convert 767 miles per hour (speed of sound) to feet per second.

15.12

15.13

Convert 14.6 pounds per square inch (atmospheric pressure at sea level) to kilograms per square meter.

Convert 19.1 grams per cubic centimeter (density of uranium) to pounds per cubic foot.

15.14

15.15

| Convert 38 miles per gallon (highway mileage for a Mini Cooper) to kilometers per liter. |  |
|--|--|
| 15.16  |  |
|  |  |