

# Basic Unit Conversion

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## Problems

1. Convert 15 mL to liters.
2. How many millimeters are in 5.3 km?
3. How many kilograms in 25 g?
4. How many grams in 25 kg?
5. Convert 10 m/s to miles per hour if there are 1609 m in a mile.
6. A rectangularly shaped garden has dimensions 3ft by 15ft. What is its area in yds<sup>2</sup>? (There are 3 ft in one yard).
7. The area of a television screen is 2 m<sup>2</sup>. What is its area in cm<sup>2</sup>?
8. A (quite large) square shaped painting has an area of 13 yd<sup>2</sup>. What is its area in ft?
9. A circular plate has a radius of 7 in. If there are 2.54 cm in an inch, What is the area of the circular plate measured in cm<sup>2</sup>?
10. A bottle of coke has an **energy density** of 6.25 cal/oz. If there are 4184 J in one food calorie, and 0.03 L in one oz, what is the energy density in of the bottle of coke measured in J/L?

### **Answers**

1. 0.015 L
2. 5,300,000 mm
3. 0.025 kg
4. 25,000 g
5. 22.374 mph
6. 5 yd<sup>2</sup>
7. 20,000 cm<sup>2</sup>
8. 117 ft<sup>2</sup>
9.  $316.1284\pi$  cm<sup>2</sup>
10. 275,558,588J/L