

Unit Conversion

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1. Jean Ralphio runs at a speed of 2 m/s . If there are 1609 m in a mile, then what is his speed measured in miles per hour? How meters does he cover in 3 hours? How many miles does he cover in 4 hours?
2. A rectangularly shaped garden is 3m on each side. What is its area in yards^2 ?
3. The area of a television screen is 1.5m^2 . If the thickness of the television is 0.3m , what is its area in cm^2 ? What is its volume in cm^3 ?
4. 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^2 ? If the plate has a thickness of 0.4 cm and is roughly shaped like a cylinder, what is its volume in in^3 ?
5. 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 . How many Joules of energy are there in a 2L bottle of coke?