Exercises

Exercise 01: **Measurement Units**

1. Convert the following lengths:
    - 3 meters to centimeters.
    - 45 inches to feet.
    - 2.5 kilometers to meters.
2. Calculate the perimeter of a rectangular room with a length of 5 meters and a width of 3 meters. Express the answer in both meters and centimeters.
3. If a swimming pool has dimensions of 10 meters in length, 4 meters in width, and 2 meters in depth, calculate its volume in cubic meters. Also, convert this volume to liters.
4. A car travels at a speed of 90 kilometers per hour. How many meters does it travel in 30 minutes? (Remember that 1 hour is equal to 3,600 seconds.)
5. If you have a 2-liter bottle filled with a beverage, how many milliliters are in the bottle?

Exercise 02: Area and Volume

6. Find the area of a rectangle with a length of 8 cm and a width of 5 cm.
7. Calculate the volume of a cylindrical container with a radius of 4 cm and a height of 10 cm. Express the volume in cubic centimeters.
8. Determine the area of a triangular garden with a base of 6 meters and a height of 8 meters.
9. If you have a cube with sides that are each 3 centimeters long, calculate its volume.
10. Find the volume of a sphere with a radius of 6 inches.

Exercise 03: Power

11. A machine does 5,000 joules of work in 10 seconds. Calculate the power output of the machine in watts.
12. If a light bulb uses 60 watts of power, how much energy does it consume if it is turned on for 5 hours?
13. A car engine produces 200 horsepower. Convert this power to watts.
14. Calculate the power used by a microwave oven that heats food for 3 minutes and consumes 1,000 joules of energy.
15. A water pump lifts 2,000 liters of water to a height of 10 meters in 20 minutes. Calculate the power output of the pump in watts.