

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

1. While in science class a student measured a cube. She measured the mass of the cube using a triple beam balance it was 21g. She also measured the volume of the sides using a ruler. The volume of the cube was  $7\text{cm}^3$ . What is the density of her cube?

**Given:**

**Formula:**

**Work:**

**Answer:**

2. Keith took a cube and measured the mass and volume of a cube. He discovered the mass to be 36g and the volume to be  $6\text{cm}^3$ . What is the density of the cube?

**Given:**

**Formula:**

**Work:**

**Answer:**

3. Calculate the density of a cube that measures 72g and all sides of the cube measure 2cm.

**Given:**

**Formula:**

**Work:**

**Answer:**

4. What is the density of a cube that when placed on a triple beam balance measures to be 64g and has volume of  $8\text{cm}^3$ ?

**Given:**

**Formula:**

**Work:**

**Answer:**

5. A student was asked to determine the density of an unknown substance. He measured the mass of the object and determined it to be 162g. He also measured the side of the cube using a ruler, it measured to be 3cm on all sides. What is the density of the cube?

**Given:**

**Formula:**

**Work:**

**Answer:**

6. A student measured the mass of her cube it measured to be 125g. She also measured the length of the sides to be 2.5cm. What is the density of her cube?

**Given:**

**Formula:**

**Work:**

**Answer:**