**Answer on Question #61608 – Math – Geometry**

**Question**

An edge of ice measures 20 inches. The ice melts until it weighs half as the original size. Find the dimensions of the new ice cube.

**Solution**

Since an edge of ice measures 20 inches then the volume of ice cube is $20 \cdot 20 \cdot 20 = 8000$ cubic inches.

The half of its original volume is 4000 cubic inches.

Let an edge of new ice cube measures $x$ inches. Then $x^3 = 4000$.

$x = \sqrt[3]{4000} = 10\sqrt[3]{4} \approx 16$ (inches).

**Answer:** 16 inches.