

**Answer on Question #54085 – Math – Algebra**

The average weight of a midsize car is  $1\frac{3}{4}$  tons. The average weight of a compact car is  $\frac{6}{7}$  of the weight of a midsize car. How many tons does a compact car weigh?

**Solution**

Weight of midsize car is  $1\frac{3}{4}$  tons. It is equal to  $\frac{7}{4}$  tons.

Weight of a compact car is  $\frac{6}{7}$  of the weight of a midsize car:

$$\frac{6}{7} \cdot \frac{7}{4} = \frac{6 \cdot 7}{7 \cdot 4} = \frac{6}{4} \cdot \frac{7}{7} = \frac{6}{4} = \frac{3 \cdot 2}{2 \cdot 2} = \frac{3}{2} = 1\frac{1}{2} \text{ tons.}$$

**Answer:** weight of a compact car is  $1\frac{1}{2}$  tons.