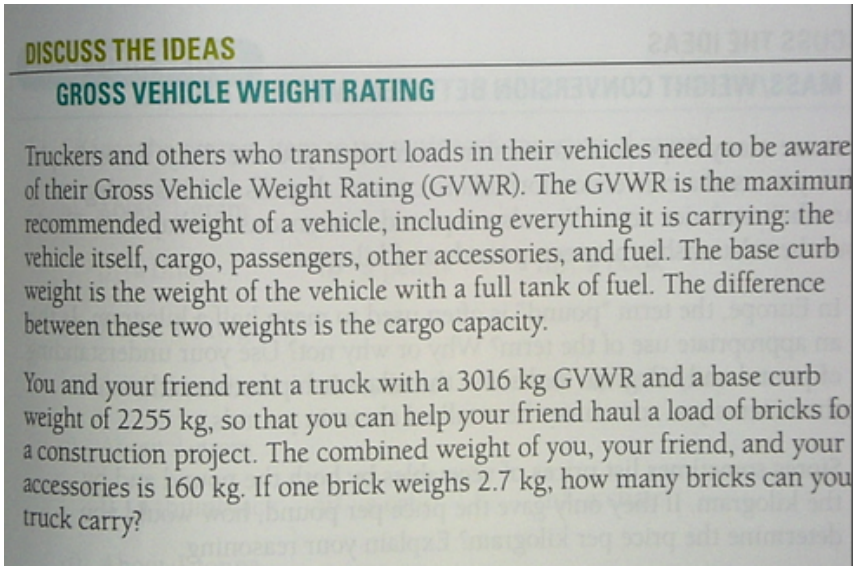


DISCUSS THE IDEAS

GROSS VEHICLE WEIGHT RATING

Truckers and others who transport loads in their vehicles need to be aware of their Gross Vehicle Weight Rating (GVWR). The GVWR is the maximum recommended weight of a vehicle, including everything it is carrying: the vehicle itself, cargo, passengers, other accessories, and fuel. The base curb weight is the weight of the vehicle with a full tank of fuel. The difference between these two weights is the cargo capacity.

You and your friend rent a truck with a 3016 kg GVWR and a base curb weight of 2255 kg, so that you can help your friend haul a load of bricks fo a construction project. The combined weight of you, your friend, and your accessories is 160 kg. If one brick weighs 2.7 kg, how many bricks can you truck carry?

$3016 - 2255 - 160 = 601\,kg$

$\frac{601\,kg}{2.7\,kg} = 222.59\ Bricks$

222 Bricks

EXAMPLE 1:

A recipe for cornbread calls for 120 g of flour, 170 g of cornmeal, and 50 g of sugar. If you want to double the recipe, what is the total weight of the dry ingredients?

Solution is... 680 g

$120g + 170g + 50g = 340g$

$2 \times 340 = 680g$

EXAMPLE 2:

Mrs. MacAllister is baking apple pies. According to her recipe, she needs 6 pounds of apples. The bag of apples she bought only shows the weight in kilograms. Can you help her out???

Solution is... 2.7 kg

Remember... 1 kg = 2.2 lbs

$$6 \text{ lbs} \times \frac{1 \text{ kg}}{2.2 \text{ lbs}} = 2.72 \text{ kg}$$

NOTE: To estimate a conversion from pounds to kilograms you can think of a pound being about 1/2 kg.

EXAMPLE 3:

The cost of bananas at the Irving is $0.49/lb, but you see an advertisement for bananas on sale at Sobey's for $1.03/kg. **Which is a better buy?**

Solution is... Sobey's

$$\$0.49 \times \frac{2.2 \text{ lb}}{1 \text{ kg}} = \$1.078/\text{kg}$$

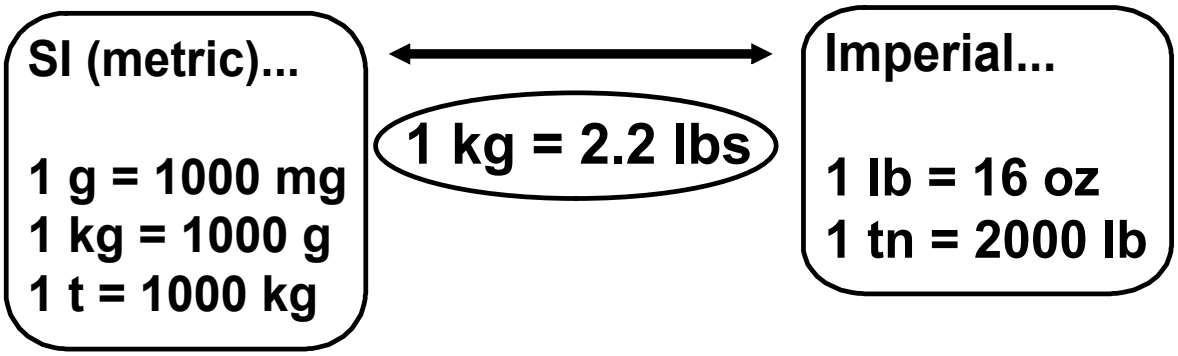
$$= \$1.08/\text{kg}$$

Sobey's is the better buy.

Work on these...

5.3 Worksheet - Mass in a SI System.docx

Remember...



Attachments

5.3 Worksheet - Mass in a SI System.docx