## 6-3 Converting Rates and Measures

Before we begin: How do we multiply fractions?

$$\frac{2}{3}\cdot\frac{5}{7}=\frac{20}{21}\approx$$

What if you multiply a number by 1?

Let's make a list of equal measurements.

Equal measurements can be written as fractions that are equal to 1.

5 5

12 in.

17th.

Ex. 1 Last year Mr. Ebert ran 520 miles. How many miles is this per month?

500 miles 14ear = 500m.

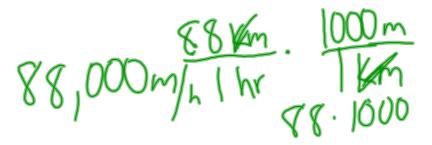
4ear 12 months 12 no.

43.3 miles/month

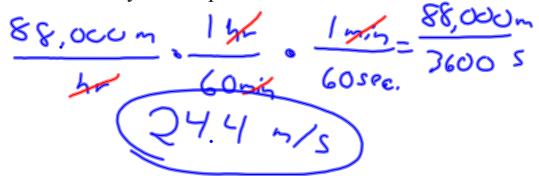
How many miles is this per day?

520 miles / \_ 520 mi Year 365 days

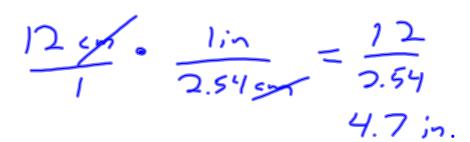
1.4 miles/day Ex. 2 Mr. Ebert is driving at 88 km per hour. How many meters per hour is this?



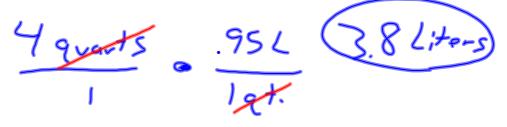
How many meters per second is this?



Ex. 3 How many inches is 12 cm?



How many liters is 4 quarts?



Ex. 4 Skydivers fall at 176 feet per second. How many miles per hour is this?

If I drive 55 miles per hour, how many feet per second is this?

Ex. 5 In Brazil, about 20 acres of rainforest are destroyed each minute. How much rainforest is destroyed per day?

Ex. 6	An elephant can eat up to 440 pounds of
	vegetation each day. How many grams per minute
	is this?

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