

Rates 2

The other day you were given a rate and needed to use it to find the unit rate. Today you will be given a unit rate that you will use to determine other rates. To show how this is done, we will work through an example together following the steps below.

1. Determine your heart rate by counting how many times it beats per minute. Record it in the space provided.

$$\frac{62 \text{ beats}}{\text{min}}$$

2. Now that you know how many times your heart beats in a minute, use this information to set up a proportion to find out how many times your heart beats in an hour (Remember there are 60 minutes in an hour).

$$\frac{62 \text{ beats}}{\text{min}} \overset{\times 60}{=} \frac{3720 \text{ beats}}{60 \text{ min}} \text{ or } \frac{3720 \text{ beats}}{\text{h}}$$

3. How many times does your heart beat in a day (ie. 24 hours)? Be sure to show your work.

$$\frac{3720 \text{ beats}}{\text{hour}} \overset{\times 24}{=} \frac{89280 \text{ beats}}{24 \text{ h}}$$

How many beats in a week?

$$\frac{89280 \text{ beats}}{\text{day}} = \frac{624960 \text{ beats}}{7 \text{ days}}$$

How many beats in 1 month (use 30 days)?

$$\frac{89280 \text{ beats}}{\text{day}} = \frac{2678400 \text{ beats}}{30 \text{ days}}$$