

HAVE A HEALTHY HEART

The human heart beats billions of times in a lifetime.
It works all day and all night without rest.

A local public service agency is planning a campaign to fight heart disease. You receive the following request from the director.

Please check the accuracy of the enclosed ad before we release it. Is the assertion that a heart beats billions of times reasonable?

Construct a brief report including:

- whether or not you agree with the claim and why;
- your own estimate for how many times a heart beats in a lifetime (explain how you got your estimate so that I can understand it and state any assumptions being used); and
- an explanation of how I can estimate how many times my own heart has beaten. (Today is my 26th birthday.)

[Source: A Guide to K-12 Program Development in Mathematics, Connecticut State Department of Education]