



"A rose-red city half as old as Time.
One billion years ago the city's age
Was just two-fifths of what Time's age will be
A billion years from now. Can you compute
How old the crimson city is today?"

Based on these five lines can you figure out how old is the Rose-Red city?



The Rose-Red city's age is seven billion years. Let C be the city's present age; T , the present age of Time. A billion years ago the city would have been $C - 1$ billion years old and a billion years from now Time's age will be $T + 1$. The data in the puzzle allows us to create two simple equations:

$$2C = T$$

$$C - 1 = \frac{2}{5}(T + 1)$$

These equations give C , the city's present age, a value of seven billion years; and T , Time's present age, a value of fourteen billion years.