

Census in the year 2000

If we continue to live our lives as we are at present, facts show that human existence may soon come to an end. The world's peoples are faced with extinction from pollution, shortage of food, the hydrogen bomb, germ warfare and depletion of natural resources. Let us put these problems aside and concentrate on another problem - population increase: in the year 2000 AD, what will be the world's population? We can derive this answer by the formula:

$$A = Pe^{rn}$$

where

$A = Pe^{rn}$	$A =$ population in the future - 2000 AD
$A = 3.8 \times 10^9 (2.7183)^{(.019) \times 30}$	$P =$ present population - 3.8 billion*
$\text{Log } A = \text{Log } 3.8 \times 10^9 + .57 \text{ Log } 2.7183$	$e =$ natural logarithm base - 2.7183
$= 9.57978 + .57 (.43428)$	$r =$ human growth per thousand
$= 9.57978 + .24754$	$=$ births - deaths
$= 9.82732$	$= 34/1000 - 15/1000^*$
$A = \text{Antilog } 9.82732$	$= 19/1000$
$A = 6.7192 \times 10^9$	$= 0.019$
	$n = 30$ years

$$A = 7,000,000,000$$

This result, showing a world population of seven billion by the year 2000 AD, indicates that the world's population will almost double in only 30 years. Do you think the world can support such a large population? Assuming Canada's population of 21.5 million* is growing at a rate of 0.02* per year, can you show that Canada's population in the year 2000 should be about 39,000,000? If the world's increase over 30 years is

$$\frac{6.7 \times 10^9}{3.8 \times 10^6} \times 100 = 180\%$$

what is the comparable figure for Canada?

**Encyclopedia Americana*, 1970 edition.

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