**How to find the an average rate of change**

1. Find the average rate of change between (0,-4) and (2, -8).



1. The table below gives values of the total world population in millions as well as the average rate of change between consecutive points.

|  |  |  |
| --- | --- | --- |
| World Population | | |
| Year | Total Population (millions) | Average Rate of Change (ARC) |
| 1850 | 1260 | ─ |
| 1900 | 1650 | 7.8 |
| 1950 | 2520 | 17.4 |
| 2000 | 6060 | 70.8 |

1. What are the units for the average rate of change in this situation?

**Millions of people per year**

1. The average rate of change between 1850 and 1900 is 7.8. Interpret this in the context of this situation.

**Each year, the population increased by 7.8 million people.**

1. Are the average rates of change increasing, decreasing, or constant?

**increasing**