

Rate of Change

Rate of change compares two quantities, x and y , that are changing.

Reminder: the x variable normally represents time like minutes, hours, months, years, etc.

1. At 9:15 you have typed 275 words. By 9:27, you have typed 660 words. What is your average change in words per minute?

$$\text{Rate of Change} = \frac{\text{change of } y}{\text{change of } x}$$

$$660 - 275 = 385$$

$$\frac{385}{12}$$

$$27 - 15 = 12$$

32 w.p.m.

Table of Minimum Wage Amounts

X Year	Wage Y
1960	\$1.00
1970	\$1.20
1980	\$3.10
1990	\$3.80
2000	\$5.15
2010	\$7.25

2. What is the average yearly increase from 1980 - 1990?

$$\frac{.70}{10} \quad \$.07$$

3. What is the average yearly increase from 1960 - 2010?

$$\frac{6.25}{50} \quad \$.125 \quad 12.5 \text{¢}$$