## Station 1



Find the rate of change between point $A$ and $C$

# Station 2 



Find the rate of change between point D and E

## Station 3

The table below shows the amount of carbon dioxide in the Earth's atmosphere for selected years. (Source: the Weather Channel). Find the average rate of change from 1968 to 2003.

| Year | $\mathrm{CO}_{2}$ in <br> Atmosphere <br> $(\mathrm{ppm})$ |
| :---: | :---: |
| 1968 | 324.14 |
| 1983 | 343.91 |
| 1998 | 367.68 |
| 2003 | 376.68 |
| 2008 | 385.60 |

## Station 4

Imagine that you are shopping for a vehicle. One of the cars you are considering sells for \$22 000 new. However, like most vehicles, this car loses value, or depreciates, as it ages. The table to the right shows the value of the car over a 10-year period.

Find the average rate of change from year 3 to year 5 .

| Time <br> (years) | Value <br> (\$) |
| :---: | :---: |
| 0 | 22000 |
| 1 | 16200 |
| 2 | 14350 |
| 3 | 11760 |
| 4 | 8980 |
| 5 | 7820 |
| 6 | 6950 |
| 7 | 6270 |
| 8 | 5060 |
| 9 | 4380 |
| 10 | 4050 |

## Station 5

Imagine that you are shopping for a vehicle. One of the cars you are considering sells for \$22 000 new. However, like most vehicles, this car loses value, or depreciates, as it ages. The table to the right shows the value of the car over a 10-year period.

Find the average rate of change from year 0 to year 10.

| Time <br> (years) | Value <br> (\$) |
| :---: | :---: |
| 0 | 22000 |
| 1 | 16200 |
| 2 | 14350 |
| 3 | 11760 |
| 4 | 8980 |
| 5 | 7820 |
| 6 | 6950 |
| 7 | 6270 |
| 8 | 5060 |
| 9 | 4380 |
| 10 | 4050 |

## Station 6



Find the rate of change between
point C and D

## Station 7



Find the rate of change between
point D and F

## Station 8

The table shows the height, H , of water being poured into a cone shaped cup at time, t. Find the average rate of change from 3 to 9 seconds.

| $\boldsymbol{t}(\mathrm{s})$ | $H(\mathrm{~cm})$ |
| ---: | :--- |
| 0 | 0 |
| 1 | 2.48 |
| 2 | 3.13 |
| 3 | 3.58 |
| 4 | 3.94 |
| 5 | 4.24 |
| 6 | 4.51 |
| 7 | 4.75 |
| 8 | 4.96 |
| 9 | 5.16 |
| 10 | 5.35 |

