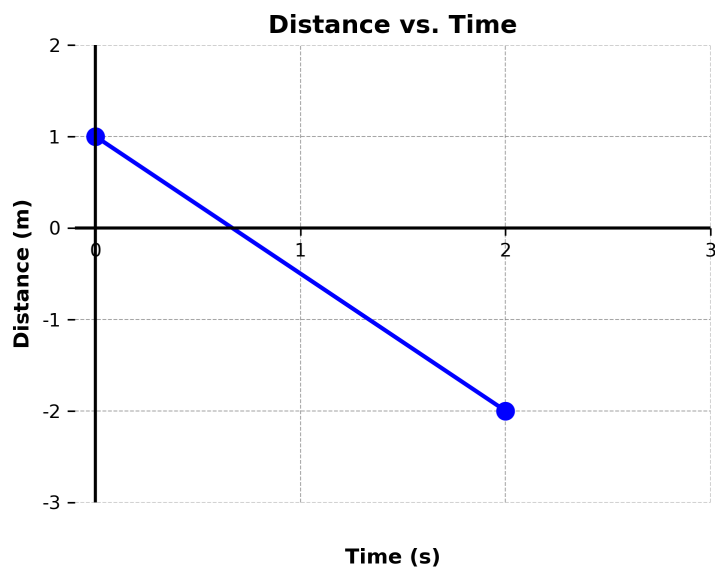
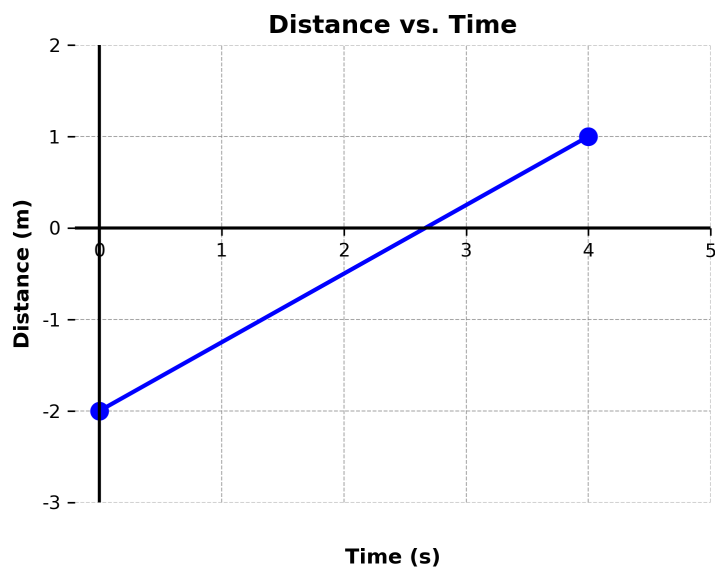


Worksheet A

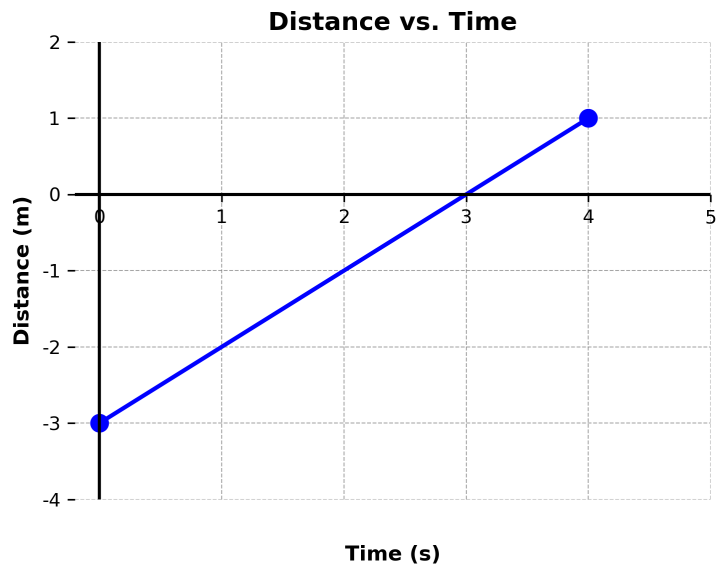
1. Calculate the rate of change from the graph below.



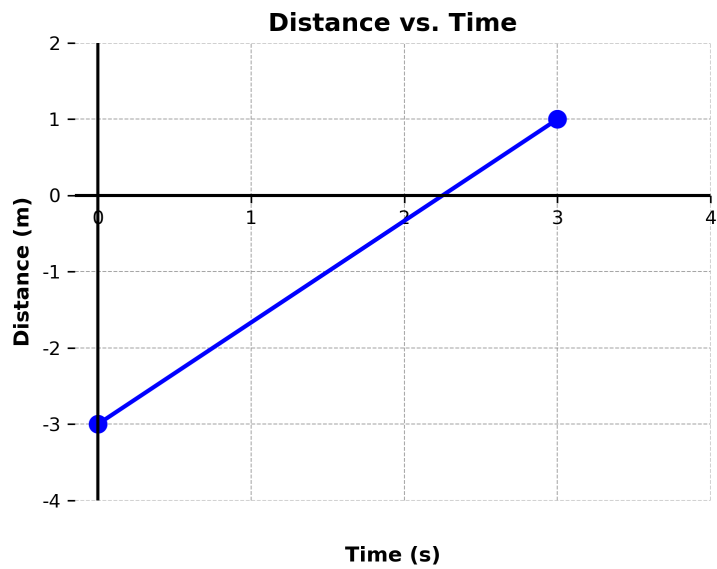
2. Calculate the rate of change from the graph below.



3. Calculate the rate of change from the graph below.



4. Calculate the rate of change from the graph below.



5. Calculate the rate of change from the table below:

Time (s)	Distance (m)
0	-0.5
1	1.0
2	-0.9
4	0.3

6. Calculate the rate of change from the table below:

Time (s)	Distance (m)
0	1.9
2	0.0
3	1.7
4	1.2

7. Calculate the rate of change from the table below:

Time (s)	Distance (m)
0	1.3
1	-0.9
4	-1.5
5	-1.4

8. Calculate the rate of change from the table below:

Time (s)	Distance (m)
0	1.7
2	0.7
3	-0.1
5	-0.5

9. An elevator starts at floor -2. After 3 seconds, it is at floor 1. Calculate the rate of change.

10. An elevator starts at floor -2. After 4 seconds, it is at floor 1. Calculate the rate of change.

Answer Key

1. The rate of change is $\frac{\Delta y}{\Delta x} = \frac{-2-1}{2-0} = -1.5$ units/s.
2. The rate of change is $\frac{\Delta y}{\Delta x} = \frac{1--2}{4-0} = 0.75$ units/s.
3. The rate of change is $\frac{\Delta y}{\Delta x} = \frac{1--3}{4-0} = 1.0$ units/s.
4. The rate of change is $\frac{\Delta y}{\Delta x} = \frac{1--3}{3-0} = 1.33$ units/s.
5. The rate of change is $\frac{\Delta y}{\Delta x} = \frac{0.3--0.5}{4-0} = 0.2$ units/s.
6. The rate of change is $\frac{\Delta y}{\Delta x} = \frac{1.2-1.9}{4-0} = -0.17$ units/s.
7. The rate of change is $\frac{\Delta y}{\Delta x} = \frac{-1.4-1.3}{5-0} = -0.54$ units/s.
8. The rate of change is $\frac{\Delta y}{\Delta x} = \frac{-0.5-1.7}{5-0} = -0.44$ units/s.
9. The rate of change is $\frac{\Delta y}{\Delta x} = \frac{1--2}{3} = 1.0$ floors/s.
10. The rate of change is $\frac{\Delta y}{\Delta x} = \frac{1--2}{4} = 0.75$ floors/s.