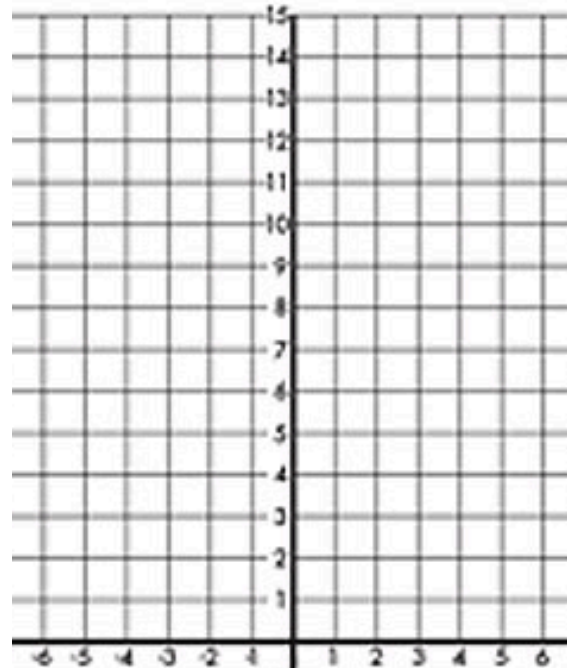


Example 1 - Area of a Square Based on Its Side Lengths

| | | | | | |
|-----------------------------------|---|---|---|---|----|
| Side (cm) | 0 | 1 | 2 | 3 | 4 |
| Area (cm ²) | 0 | 1 | 4 | 9 | 16 |

- What do you notice about ordered pairs in the table?
- What is the relationship between the side lengths of a square and the square's area?



- Plot the points from the table. What do you notice about the graph?

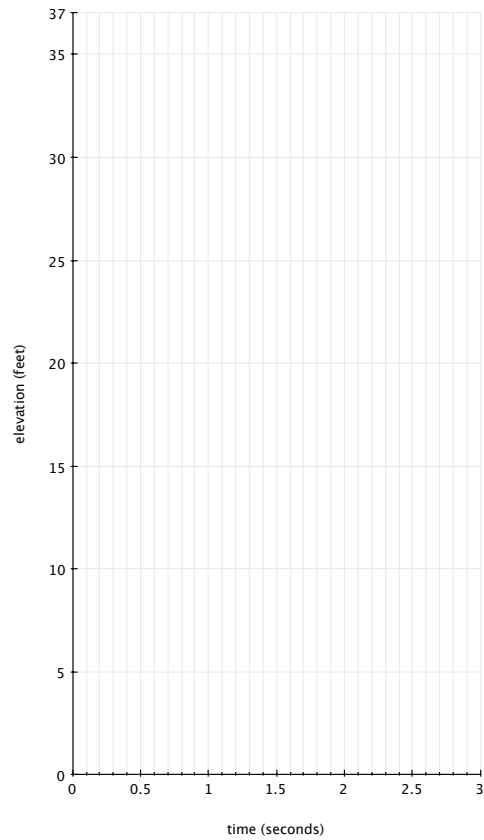
Example 2 - Elevation of a Diver

Slow-Motion

| Time (sec) | Height (ft) |
|------------|-------------|
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Real-Time

| Time (sec) | Height (ft) |
|------------|-------------|
| | |
| | |
| | |
| | |
| | |
| | |
| | |



- Estimate the change in elevation from 0 sec to 0.5 sec.
- Estimate the change in elevation from 1.0 sec to 1.5 sec.
- Is the diver falling faster at the beginning of his jump or towards the end? How do you know?