1. For each set of points, write a list of ordered pairs, and then complete the T-table.

<table>
<thead>
<tr>
<th>Ordered Pairs</th>
<th>First Number</th>
<th>Second Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2, 1)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>( , )</td>
<td>( , )</td>
<td></td>
</tr>
<tr>
<td>( , )</td>
<td>( , )</td>
<td></td>
</tr>
<tr>
<td>( , )</td>
<td>( , )</td>
<td></td>
</tr>
</tbody>
</table>

2. Mark four points on the line segments. Then write a list of ordered pairs, and complete the T-table.

<table>
<thead>
<tr>
<th>Ordered Pairs</th>
<th>First Number</th>
<th>Second Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1, 3)</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>( , )</td>
<td>( , )</td>
<td></td>
</tr>
<tr>
<td>( , )</td>
<td>( , )</td>
<td></td>
</tr>
<tr>
<td>( , )</td>
<td>( , )</td>
<td></td>
</tr>
</tbody>
</table>
3. Write a list of ordered pairs based on the T-table provided. Mark the ordered pairs on the graph and connect the points to form a line.

<table>
<thead>
<tr>
<th>First Number</th>
<th>Second Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

4. Draw a graph for each T-table (as in Question 3).

**NOTE:** Make sure you look carefully at the scale in part d).

a) Input | Output
---|---
2 | 5
4 | 6
6 | 7
8 | 8

b) Input | Output
---|---
1 | 7
2 | 6
3 | 5
4 | 4

c) Input | Output
---|---
2 | 4
4 | 8
6 | 12
8 | 16

d) Input | Output
---|---
1 | 6
3 | 8
5 | 10
7 | 12

BONUS

5. Draw a coordinate grid (like those above) on grid paper and plot the following ordered pairs: (1, 2), (3, 5), (5, 8), and (7, 11).

6. On grid paper, make a T-table and graph for the following rules.
   a) Multiply by 2 and subtract 1
   b) Multiply by 4 and subtract 3
   c) Divide by 2 and add 3
7. Make a T-table for each set of points on the coordinate grid. Write a rule for each T-table that tells you how to calculate the output from the input. (See the rules in Question 6.)

<table>
<thead>
<tr>
<th>Graph A</th>
<th>Graph B</th>
<th>Graph C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input</td>
<td>Output</td>
<td>Input</td>
</tr>
</tbody>
</table>

Rule for T-table A: ____________________________

Rule for T-table B: ____________________________

Rule for T-table C: ____________________________

8. Mark four points that lie on a straight line in the coordinate grid. Then, make a T-table for your set of points.
1. The graph shows the cost of making a long distance telephone call.
   a) If you talked for 2 minutes, how much would you pay?
   b) What is the cost for a minute call?
   c) How much would you pay to talk for 10 minutes?
   d) If you paid 6 dollars, how long would you be able to talk for?
   e) How much would you pay to talk for 30 seconds?

2. The graph shows the distance Kathy travelled on a cycling trip.
   a) How far had Kathy cycled after 2 hours?
   b) How far had Kathy travelled after 6 hours?
   c) Did Kathy rest at all on her trip? How do you know?
   d) When she was cycling, did Kathy always travel at the same speed?

3. Ben and Tom run a 120 m race.
   a) How far from the start was Tom after 10 seconds?
   b) How far from the start was Ben after 15 seconds?
   c) Who won the race? By how much?
   d) How much of a head start did Ben have?
   e) How many seconds from the start did Tom overtake Ben?

4. The graph shows the cost of renting a bike from Mike’s store.
   a) How much would you pay to rent the bike for:
      i) 2 hours?  ii) 4 hours?  iii) 3 hours?
   b) How much do you pay for the bike before you have even ridden it?
   c) Dave’s store charges $3.50 an hour for a bike. Whose store would you rent from if you wanted the bike for 3 hours? Explain.