1. The graph shows the relationship between time spent smoking a cigarette and pulse rate. Zero minutes is the moment a smoker lights a cigarette.
   a. When is the pulse rate 70?
   b. When does the pulse rate show the greatest change?

2. Use the table to answer the following questions.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Graphing Calculators Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>1.6 million</td>
</tr>
<tr>
<td>1996</td>
<td>4.2 million</td>
</tr>
</tbody>
</table>

   a. Find the percent increase.
   b. Find the average rate of change.
3. Find the x and y intercepts and graph the lines. Label your axis and choose an appropriate scale.
   a. \( y = 3x - 21 \)  
   (What does the line represent?) 
   b. \( .02x + 15y = 110 \)  
   (What does the line represent?)

4. Solve the following inequalities.
   a. \( 6 - 2x \geq 11 \)  
   b. \( 2 < 5 + 3x < 15 \)

5. Charles Weed wants to enclose his garden with a fence. The width of the garden is 40 feet. If the perimeter of the garden has to be more than 150 feet but less than 310 feet, find the range of the length of the garden. You must set up an inequality. Hint: \( P = 2W + 2L \).
6. Two companies offer you very similar sales positions. DOLE Corp. pays $33,000 a year while Oats, Inc. pays $15,000 a year plus 3% commission.

a. Write an equation for your yearly wages from DOLE and Oats.

b. Graph both equations on the same set of axis. Label your axis and choose an appropriate scale. Only graph the portion that is relevant to the problem. (You may want to do part c first.)
c. Use the equation to find where the two lines intersect. Label this point on the graph.

d. Use the graph to find when DOLE pays more than Oats.

e. Use the graph to find when Oats pays more than DOLE.

f. What do the y-intercepts mean in terms of the problem?

g. Find the slope of each line and explain what it means in terms of the problem.