Homework 8a

§ 1 Straight Lines

1. (a) Complete the table below for $y = 2x - 1$.

<table>
<thead>
<tr>
<th>$x$</th>
<th>-1</th>
<th>1</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>$y$</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(b) Using the table in part (a), draw the graph of the line $y = 2x - 1$ on the grid below.

2. State the gradient and the y-intercept point for each line below.
   (a) $y = x - 7$  (b) $y = -5x + 3$  (c) $y = 3x - 10$
   (d) $y = -4x$   (e) $2x + y = 11$  (f) $2y = x - 5$

3. (a) Complete the table below for $y = 2x - 3$.

<table>
<thead>
<tr>
<th>$x$</th>
<th>-1</th>
<th>1</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>$y$</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(b) Using the table in part (a), draw the graph of the line $y = 2x - 3$ on the grid below.
Homework 8b

§ 2 Pie Charts

1. Draw a pie chart to represent the information in the table below.

<table>
<thead>
<tr>
<th>Type of House</th>
<th>Bungalow</th>
<th>Villa</th>
<th>Terraced</th>
<th>Flats</th>
<th>Semi-detached</th>
</tr>
</thead>
<tbody>
<tr>
<td>Houses Built</td>
<td>300</td>
<td>150</td>
<td>450</td>
<td>1500</td>
<td>1200</td>
</tr>
</tbody>
</table>

Homework 8c

§ 3 Mixed

1. a) Draw the next T-shape in this sequence.

   Shape 1
   Shape 2
   Shape 3
   Shape 4

   b) Complete the following table.

<table>
<thead>
<tr>
<th>Shape number (s)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of dots (d)</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   c) Write down a formula for the numbers of the dots, d when you know the shape number, s.

   d) 101 dots are used in drawing a T-shape. What is the shape number?

2. Calculate:

   a) $5 + 2 \times 3$  
   b) $18 - 9 \div 3$  
   c) $36 \div 6 + 3$  
   d) $(25 + 15) \div 4$

3. Calculate:

   a) £5·60 + £2·99  
   b) £17·80 – £5·99  
   c) £2·99 x 6

   d) £6·35 x 10  
   e) £26·45 ÷ 5  
   f) £472 ÷ 100

4. Ron works 4 days a week. He is paid £49 per day. Calculate his weekly earnings.