A warehouse employee at a computer manufacturer is paid $11.50 per hour with time and a half for all hours over 40 in a week. Find the employee's gross pay if she worked 46 hours in one week.

Step 1: List variables & details

- Wage per hour = $11.50
- Overtime rate = 1.5
  (over 40 hours)
- Total employee hours for week = 46

Find gross pay

2nd: Set up & solve

Overtime hours = 46 - 40 = 6
Overtime rate = $11.50 \times 1.5 \
\text{godd pay} = 40 \times $11.50 + 6 \times $17.25 \
\text{Answer using words}

At $11.50 per hour & time and a half, the warehouse employee earned a gross pay of $563.50 for 46 hours of work.
If the employees gross pay is $563.50, calculate the deductions for the following taxes:

1st List variables & details
   gross pay = $563.50

2nd Set up & solve

Social Security
   Because employee's earnings to date are under the ceiling she is taxed
   349.370
   Rounded $349.94

FICA Social Security
   Rate = .062
   Ceiling = 84,900

FICA Medicare
   Rate = .0145
   Ceiling = none

Federal Income Tax
   Single worker
   1 withholding allowances

Federal Income Tax
   Gross $563.50
   Example of table for single weekly

<table>
<thead>
<tr>
<th>At least</th>
<th>But less Than</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>550</td>
<td>560</td>
<td>65</td>
<td>57</td>
<td>49</td>
<td>41</td>
</tr>
<tr>
<td>560</td>
<td>570</td>
<td>66</td>
<td>58</td>
<td>51</td>
<td>43</td>
</tr>
<tr>
<td>570</td>
<td>580</td>
<td>68</td>
<td>60</td>
<td>52</td>
<td>44</td>
</tr>
</tbody>
</table>

3rd Write Answer in words.

Answer: The deductions for the employee are:
   FICA SS = $349.94, FICA M. = $8.17 and Fed. I.T = $58.00