# Worksheet on Square Root Functions (V2)

<table>
<thead>
<tr>
<th>Equation</th>
<th>Basic Shape</th>
<th>&quot;vertex&quot;</th>
<th>Value of a</th>
<th>Up/Down</th>
<th>Left/Right</th>
<th>Final Shape</th>
</tr>
</thead>
<tbody>
<tr>
<td>$y = \sqrt{-x-8} + 9$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$y = -6\sqrt{7} + x - 5$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$y = -9 + \sqrt{7-x}$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$y = \sqrt{3x-7}$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$y = -2\sqrt{x-9} + 2$</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
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**Worksheet on Square Root Functions (V2)**

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<tbody>
<tr>
<td>( y = \sqrt{-x} - 8 + 9 )</td>
<td>( \rightarrow )</td>
<td>((-8, 9))</td>
<td>1</td>
<td>UP</td>
<td>Left ((-x))</td>
<td>( \leftarrow )</td>
</tr>
<tr>
<td>( y = -6\sqrt{7+x} - 5 )</td>
<td>( \rightarrow )</td>
<td>((-7, -5))</td>
<td>-6</td>
<td>Down</td>
<td>Right ((+x))</td>
<td>( \rightarrow )</td>
</tr>
<tr>
<td>( y = -9 + \sqrt{7-x} )</td>
<td>( \rightarrow )</td>
<td>((7, -9))</td>
<td>1</td>
<td>UP</td>
<td>Left ((-x))</td>
<td>( \leftarrow )</td>
</tr>
<tr>
<td>( y = \sqrt{3x-7} )</td>
<td>( \rightarrow )</td>
<td>((\frac{7}{3}, 0))</td>
<td>1</td>
<td>UP</td>
<td>Right ((+x))</td>
<td>( \rightarrow )</td>
</tr>
<tr>
<td>( y = -2\sqrt{x-9} + 2 )</td>
<td>( \rightarrow )</td>
<td>((9, 2))</td>
<td>-2</td>
<td>Down</td>
<td>Right ((+x))</td>
<td>( \rightarrow )</td>
</tr>
</tbody>
</table>

\[3x - 7 = 0\]
\[3x = 7\]
\[x = \frac{7}{3}\]