Problem-Solving Strategy: Work Backward

Read It Look for information.
Lisa is thinking of a number. She divides the number by 5, multiplies by 2, subtracts 10, then adds 1. The result is 15. What is Lisa’s number?

Picture It Work backward to find the number.

<table>
<thead>
<tr>
<th>15</th>
<th>−1</th>
<th>_____</th>
<th>+10</th>
<th>_____</th>
<th>÷2</th>
<th>_____</th>
<th>×5</th>
<th>_____</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lisa’s result</td>
<td>Use the inverse of addition</td>
<td>Use the inverse of subtraction</td>
<td>Use the inverse of multiplication</td>
<td>Use the inverse of division</td>
<td>Lisa’s number</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Solve It Use the table to solve the problem.
1. Solve each of the steps. Fill in the answers in the table above.
2. ____________ is Lisa’s number.

Try These! Use the work backward strategy to solve.

3. On the soccer team, there are half as many third-graders as fourth-graders. There are 4 more fifth-graders than fourth-graders. If there are 12 third-graders, how many fifth-graders are there?

4. Emma buys a magazine for $3.75, a drink for $1.25, and a pack of mints for $0.75. If she has $3.25 left over, how much money did she begin with?

5. Jake rode his bike for 15 minutes to the store, 20 minutes to his friend’s house, 25 minutes to school, and 10 minutes back home. If he arrives home at 4:45, at what time did he leave?