<table>
<thead>
<tr>
<th>Date</th>
<th>5-a-day</th>
<th>Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 15</td>
<td>Find the reciprocal of 1.5</td>
<td>Find the reciprocal of 0.15</td>
</tr>
</tbody>
</table>

Complete the tree diagram.

Natalie has 8 socks in a drawer. 5 of the socks are black. 3 of the socks are white.

Natalie takes out a sock at random, writes down its colour and puts it back into the drawer. Then Natalie takes out a second sock, at random, and writes down its colour.

Work out the probability both socks are different colours.

Find y.

Prove that

\[(n + 1)^2 - (n - 1)^2 + 3\]

is always odd for all positive integer values of n.