$\delta_1(i) = \pi_i b_i(R)$

$i=1: \ \frac{1}{3} \cdot \frac{1}{2} = \frac{1}{6}$

$\psi_1(1) = 0$

$i=2: \ \frac{1}{3} \cdot \frac{1}{3} = \frac{1}{9}$

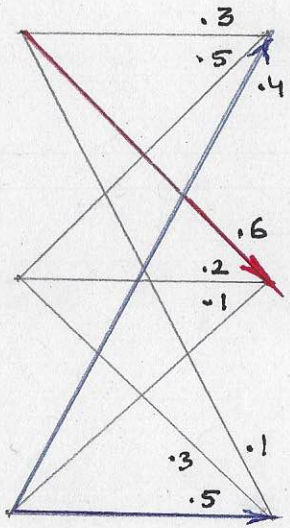
$\psi_1(2) = 0$

$i=3: \ \frac{1}{3} \cdot \frac{3}{4} = \frac{1}{4}$

$\psi_1(3) = 0$

$t=1$

$\delta_2(i) = \max_{1 \le k \le 3} [\delta_1(k) a_{ki}] b_i(R)$



$\left[\frac{1}{4}(0.4)\right]\frac{1}{2} = 0.05$

$\psi_2(1) = 3$

$\left[\frac{1}{6}(0.6)\right]\frac{2}{3} = \frac{1}{15}$

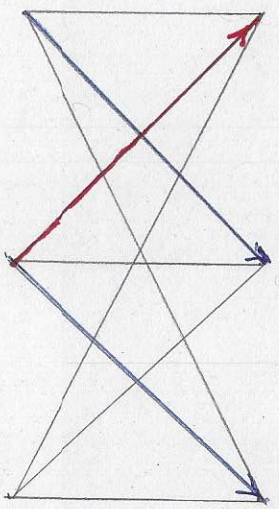
$\psi_2(2) = 1$

$\left[\frac{1}{4}(0.5)\right]\frac{1}{4} = \frac{1}{32}$

$\psi_2(3) = 3$

$t=2$

$\delta_3(i) = \max_{1 \le k \le 3} [\delta_2(k) a_{ki}] b_i(R)$



$\left[\frac{1}{15}(0.5)\right]\frac{1}{2} = \frac{1}{60}$

$\psi_3(1) = 2$

$[0.05(0.6)]\frac{1}{3} = 0.01$

$\psi_3(2) = 1$

$[0.0\overline{6}(0.3)]\frac{3}{4} = 0.015$

$\psi_3(3) = 2$

$t=3$

VITERBI'S TRELLIS DIAGRAM