tikzpicture

axis[xmin=-3, xmax=5, ymin=-5, ymax=5, axis on top, width=, height=, tick pos=both] [draw=red, fill=red, opacity=0.5] (axis cs:3,0) -(axis cs:3,1) -(axis cs:2,1) -(axis cs:2,0) -cycle;

```
[draw=red, fill=red, opacity=0.5] (axis cs:3,1) -(axis cs:3,2) -(axis cs:2,2) -(axis cs:2,1) -cycle; [draw=red, fill=red, opacity=0.5] (axis cs:3,2) -(axis cs:3,3) -(axis cs:2,3) -(axis cs:2,2) -cycle; [draw=red, fill=red, opacity=0.5] (axis cs:3,3) -(axis cs:3,4) -(axis cs:2,4) -(axis cs:2,3) -cycle; [draw=red, fill=red, opacity=0.5] (axis cs:3,4) -(axis cs:3,5) -(axis cs:2,5) -(axis cs:2,4) -cycle; [draw=red, fill=red, opacity=0.5] (axis cs:3,-1) -(axis cs:3,0) -(axis cs:2,0) -(axis cs:2,-1) -cycle; [draw=red, fill=red, opacity=0.5] (axis cs:3,-2) -(axis cs:3,-1) -(axis cs:2,-2) -(axis cs:2,-3) -cycle; [draw=red, fill=red, opacity=0.5] (axis cs:3,-4) -(axis cs:3,-3) -(axis cs:2,-3) -(axis cs:2,-4) -cycle; [draw=red, fill=red, opacity=0.5] (axis cs:3,-5) -(axis cs:3,-4) -(axis cs:2,-4) -(axis cs:2,-5) -cycle; [draw=green!50.196078431372548!black, fill=green!50.196078431372548!black, opacity=0.5] (axis cs:4,0) -cycle;
```

at (axis cs:2.1,0.07)[ scale=0.5, anchor=base west, text=black, rotate=0.0, align=left ]  $R_1$  p=1; at (axis cs:2.1,1.07)[ scale=0.5, anchor=base west, text=black, rotate=0.0, align=left ]  $R_2$  p=1; at (axis cs:2.1,2.07)[ scale=0.5, anchor=base west, text=black, rotate=0.0, align=left ]  $R_3$  p=1; at (axis cs:2.1,3.07)[ scale=0.5, anchor=base west, text=black, rotate=0.0, align=left ]  $R_4$  p=0.5; at (axis cs:2.1,4.07)[ scale=0.5, anchor=base west, text=black, rotate=0.0, align=left ]  $R_5$  p=0; at (axis cs:2.1,-0.93)[ scale=0.5, anchor=base west, text=black, rotate=0.0, align=left ]  $R_6$  p=1; at (axis cs:2.1,-1.93)[ scale=0.5, anchor=base west, text=black, rotate=0.0, align=left ]  $R_7$  p=1; at (axis cs:2.1,-2.93)[ scale=0.5, anchor=base west, text=black, rotate=0.0, align=left ]  $R_8$  p=1; at (axis cs:2.1,-3.93)[ scale=0.5, anchor=base west, text=black, rotate=0.0, align=left ]  $R_9$  p=0.5; at (axis cs:2.1,-4.93)[ scale=0.5, anchor=base west, text=black, rotate=0.0, align=left ]  $R_9$  p=0.5; at (axis cs:2.1,-4.93)[ scale=0.5, anchor=base west, text=black, rotate=0.0, align=left ]  $R_9$  p=0.5; at (axis cs:2.1,-4.93)[ scale=0.5, anchor=base west, text=black, rotate=0.0, align=left ]  $R_9$   $R_$