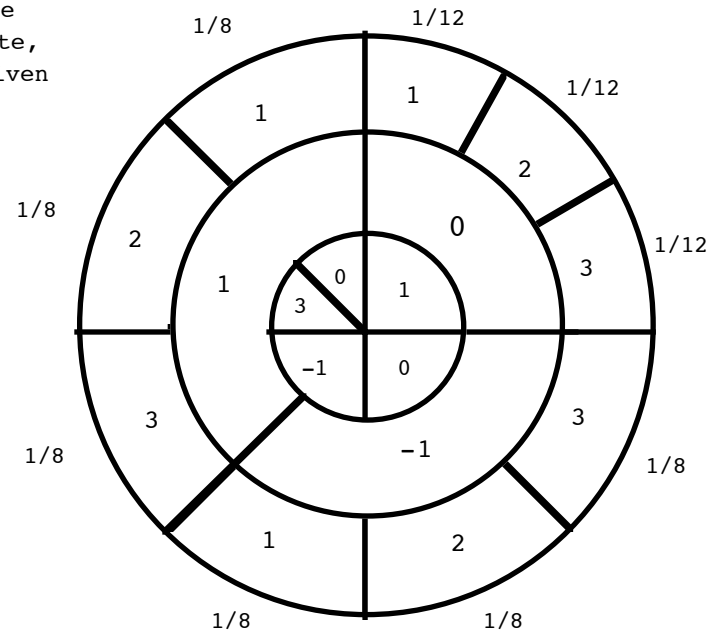


1. Suppose that the random variables X, Y, Z are obtained by spinning the adjoining roulette, with X given by the innermost circle, Y given by the intermediate circle and Z given by the outer circle. Calculate

- a) $H(Z)$
- b) $H(Z|X=0)$
- c) $H(X|Y, Z)$
- d) $H(Y, Z)$
- e) $H(X, Y, Z)$



(3) For the wheel to the right calculate:

- (a) $H(X)$
- (b) $H(X|Y = 0)$
- (c) $H(X|Y)$
- (d) $H(Y|X)$

