

$$S = \{HHH, 3 * HHT, 3 * HTT, TTT\}$$

$$S = \{0, 1, 2, 3\}$$

$$p(0) = \frac{1}{8} = \frac{1}{64}$$

$$p(1) = \frac{3}{8} = \frac{9}{64}$$

$$p(2) = \frac{3}{8} = \frac{9}{64}$$

$$p(3) = \frac{1}{8} = \frac{1}{64}$$

$$0(0)p(0) + 1p(1) + 2p(2) + 3p(3)$$