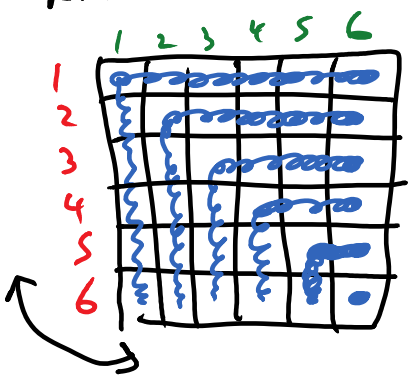
Example of the mass of a random variable.

Roll 2 dice. Let X denote the minimum, let Y denote the maximum.




mass of X

$p_X(1) = P(X=1) = \frac{11}{36}$

$p_X(2) = P(X=2) = \frac{9}{36}$

$p_X(3) = P(X=3) = \frac{7}{36}$

$p_X(4) = P(X=4) = \frac{5}{36}$

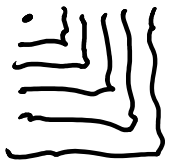
$p_X(5) = P(X=5) = \frac{3}{36}$

$p_X(6) = P(X=6) = \frac{1}{36}$

notice these mass values sum to 1.

---

mass of Y:



$p_Y(1) = \frac{1}{36}$

$p_Y(2) = \frac{3}{36}$

$p_Y(3) = \frac{5}{36}$

$p_Y(4) = \frac{7}{36}$

$p_Y(5) = \frac{9}{36}$

$p_Y(6) = \frac{11}{36}$

again the mass values of Y sum to 1 too.