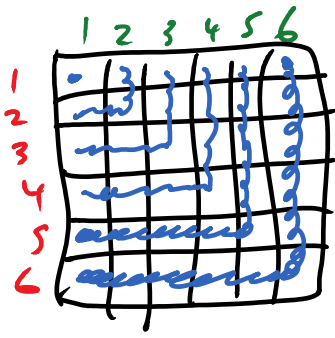


Roll 2 dice, let X denote the maximum that appears.



$X=6$ with prob $\frac{11}{36}$

$X=5$ with prob $\frac{9}{36}$

$X=4$ with prob $\frac{7}{36}$

$X=3$ with prob $\frac{5}{36}$

$X=2$ with prob $\frac{3}{36}$

$X=1$ with prob $\frac{1}{36}$

$$\begin{aligned}
 E(X) &= (1)\left(\frac{1}{36}\right) + (2)\left(\frac{3}{36}\right) + (3)\left(\frac{5}{36}\right) + (4)\left(\frac{7}{36}\right) + (5)\left(\frac{9}{36}\right) + (6)\left(\frac{11}{36}\right) \\
 &= \frac{1+6+15+28+45+66}{36} \\
 &= \frac{161}{36} = 4.472\ldots
 \end{aligned}$$

Here, $E(X)$ is not equal to 1 or 2 or 3... or 6
 That's OK. Do not round $E(X)$ (say) down to 4.
 $E(X) = \frac{161}{36}$ exactly.