

<b>X \ Y</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>1</b>	$\binom{1}{6} \frac{1}{2}$	$\binom{1}{6} \frac{1}{2}$	0	0	0	0	0
<b>2</b>	$\binom{1}{6} \frac{1}{4}$	$\binom{1}{6} \frac{1}{2}$	$\binom{1}{6} \frac{1}{4}$	0	0	0	0
<b>3</b>	$\binom{1}{6} \frac{1}{8}$	$\binom{1}{6} \frac{3}{8}$	$\binom{1}{6} \frac{3}{8}$	$\binom{1}{6} \frac{1}{8}$	0	0	0
<b>4</b>	$\binom{1}{6} \frac{1}{16}$	$\binom{1}{6} \frac{1}{4}$	$\binom{1}{6} \frac{3}{8}$	$\binom{1}{6} \frac{1}{4}$	$\binom{1}{6} \frac{1}{16}$	0	0
<b>5</b>	$\binom{1}{6} \frac{1}{32}$	$\binom{1}{6} \frac{5}{32}$	$\binom{1}{6} \frac{5}{16}$	$\binom{1}{6} \frac{5}{16}$	$\binom{1}{6} \frac{5}{32}$	$\binom{1}{6} \frac{1}{32}$	0
<b>6</b>	$\binom{1}{6} \frac{1}{64}$	$\binom{1}{6} \frac{3}{32}$	$\binom{1}{6} \frac{15}{64}$	$\binom{1}{6} \frac{5}{16}$	$\binom{1}{6} \frac{15}{64}$	$\binom{1}{6} \frac{3}{32}$	$\binom{1}{6} \frac{1}{64}$
<b>P(Y)=</b>	$\binom{1}{6} \frac{63}{64}$	$\binom{1}{6} \frac{120}{64}$	$\binom{1}{6} \frac{99}{64}$	$\binom{1}{6} \frac{64}{64}$	$\binom{1}{6} \frac{29}{64}$	$\binom{1}{6} \frac{8}{64}$	$\binom{1}{6} \frac{1}{64}$

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<b>P(Y)=</b>	$\binom{1}{6} \frac{63}{64}$	$\binom{1}{6} \frac{120}{64}$	$\binom{1}{6} \frac{99}{64}$	$\binom{1}{6} \frac{64}{64}$	$\binom{1}{6} \frac{29}{64}$	$\binom{1}{6} \frac{8}{64}$	$\binom{1}{6} \frac{1}{64}$

$$\begin{aligned}
E[Y] &= \sum_{i=1}^6 Y P(Y) = \\
&= 0 \binom{1}{6} \frac{63}{64} + 1 \binom{1}{6} \frac{120}{64} + 2 \binom{1}{6} \frac{99}{64} + 3 \binom{1}{6} \frac{64}{64} + 4 \binom{1}{6} \frac{29}{64} + 5 \binom{1}{6} \frac{8}{64} + 6 \binom{1}{6} \frac{1}{64} = \\
&= \binom{1}{6} \left( 0 \frac{63}{64} + 1 \frac{120}{64} + 2 \frac{99}{64} + 3 \frac{64}{64} + 4 \frac{29}{64} + 5 \frac{8}{64} + 6 \frac{1}{64} \right) = \binom{1}{6} \sum_{i=1}^6 i \cdot p = \\
&= \binom{1}{6} p \sum_{i=1}^6 i = \binom{1}{6} \left( \frac{1}{2} \right) \sum_{i=1}^6 i = \frac{3.5}{2} = 1.75
\end{aligned}$$