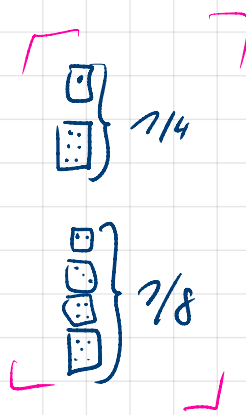


Find $P(Y=y)$ for $y=1, \dots, 6$ and $E(Y)$ and $\text{Var}(Y)$

Can	$1/2$	$1/6$	1
Tails	$1/2$	$1/6$	2
		$1/6$	3
		$1/6$	4
		$1/6$	5
		$1/6$	6
Heads	$1/2$	$1/4$	1
		$1/8$	2
		$1/8$	3
		$1/8$	4
		$1/8$	5
		$1/4$	6

$$E(Y) = (1 \cdot p_1) + (2 \cdot p_2) + \dots + (6 \cdot p_6)$$

$$\text{Var}(Y) = (1^2 \cdot p_1) + (2^2 \cdot p_2) + \dots + (6^2 \cdot p_6) - E(Y)^2$$



$$p_1 \leftarrow (1/2 \cdot 1/6) + (1/2 \cdot 1/4)$$

$$p_2 \leftarrow (1/2 \cdot 1/6) + (1/2 \cdot 1/8)$$

$$p_3 \leftarrow (1/2 \cdot 1/6) + (1/2 \cdot 1/8)$$

$$p_4 \leftarrow (1/2 \cdot 1/6) + (1/2 \cdot 1/8)$$

$$p_5 \leftarrow (1/2 \cdot 1/6) + (1/2 \cdot 1/8)$$

$$p_6 \leftarrow (1/2 \cdot 1/6) + (1/2 \cdot 1/4)$$