

Parameter	Value	Description
n	5	number of students
q	$\frac{1}{5}$	not a swimmer
p	$\frac{4}{5}$	swimmer
k	4	number of swimmers
X	$0 \leq X \leq 5$	X swimmer out of 5
Y	$0 \leq Y \leq 5$	Gaussian variable
μ	$np = 4$	mean
σ^2	$npq = \frac{4}{5}$	variance
p_Y	$\approx p_X$	by central limit theorem