

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
$\mu$	$np = 4$	mean
$\sigma^2$	$npq = \frac{4}{5}$	variance
$Y$	$\approx X$	by central limit theorem