# *Geometric distribution*

The geometric distribution is the probability that the first occurrence of success require k number of independent trials, each with success probability p.

## Probability density function

$a := \text{curve2d}\left(\text{geometricdens}(x, 0.2), x, 1, 11, 11\right)$

$b := \text{curve2d}\left(\text{geometricdens}(x, 0.5), x, 1, 11, 11\right)$

$c := \text{curve2d}\left(\text{geometricdens}(x, 0.8), x, 1, 11, 11\right)$

| Name | Title | Color | Origin |
|------|-------|-------|--------|
| a | p = 0.2 | -------- | |
| b | p = 0.5 | -------- | |
| c | p = 0.8 | -------- | |



Geometric - Probability density function