

The geometric random variable

•	Suppose that X	is a geometric	random varia	able and draw	a tree diagr	am that illus	trates how	the
	benrnoulli trials	that compose f	this random v	ariable pan o	ut for $X = 1$	X = 2 and $X = 2$	X = 3	

• Assuming that the probability of sucess in each individual trial is equal to p write out expressions for P(X = 0), P(X = 1), P(X = 2) and P(X = 3) if X is a geometric random variable.

• Write out an expression for the geometric random variable.

ullet Explain what range of values a geometric random variable X can take.