$$x = 0.2 \text{ inv_cdf} = \text{qunif(u, min} = 0, \text{max} = 1)$$

$$x = 0.2 \text{ inv_cdf} = \text{qbeta(u, shape1} = 5/3, \text{shape2} = 5/4)$$

 $x = 0.2 \text{ inv_cdf} = \text{qbeta(u, shape1} = 2, \text{shape2} = 2)$ $x = 0.2 \text{ inv_cdf} = \text{qbeta(u, shape1} = 1.1, \text{shape2} = 1)$

$$x = 0.2 \text{ inv_cdf} = \text{qbeta(u, shape1} = 1, \text{shape2} = 1.1)$$

 $x = 0.2 \text{ inv_cdf} = \text{qbeta(u, shape1} = 0.5, \text{shape2} = 0.5)$

 $x = 0.2 \text{ inv_cdf} = \text{qbeta(u, shape1 = 0.3, shape2 = 0.5)}$ $x = 0.2 \text{ inv_cdf} = \text{qbeta(u, shape1 = 0.4, shape2 = 0.6)}$

$$x = 0.2 \text{ inv_cdf} = \text{qbeta(u, shape1} = 0.3, \text{shape2} = 0.7)$$

 $x = 0.2 \text{ inv_cdf} = \text{qbeta(u, shape1} = 0.2, \text{shape2} = 0.8)$

x = 0.2 inv_cdf = qbeta(u, shape1 = 0.1, shape2 = 0.9)