$\Pr(x; \alpha, \beta) = \frac{1}{B(\alpha, \beta)} x^{\alpha - 1} (1 - x)^{\beta - 1}$ $\mu = \frac{\alpha}{\alpha + \beta} \ \sigma^2 = \frac{\alpha \beta}{(\alpha + \beta)^2 (\alpha + \beta + 1)}$ → 0.5 0.0 multimodal included bimodal middle d excluded $\alpha = 1$ $\alpha=1$ $\alpha=1$ $\alpha=1$ $\alpha=1$ $\alpha=1$ $\alpha=1$ $\alpha=1$ $\alpha = 1$ $\beta = 2 \quad \beta = 3 \quad \beta = 4 \quad \beta = 5 \quad \beta = 6 \quad \beta = 7 \quad \beta = 8 \quad \beta = 9 \quad \beta = 10 \quad \beta = 11 \quad \beta = 12 \quad \beta = 13 \quad \beta = 14 \quad \beta = 15 \quad \beta = 16 \quad \beta = 17 \quad \beta = 18 \quad \beta = 19 \quad \beta = 20 \quad \beta = 10 \quad$ bimodal $\alpha = \frac{1}{2} \quad \alpha = \frac{1}{3} \quad \alpha = \frac{1}{4} \quad \alpha = \frac{1}{5} \quad \alpha = \frac{1}{6} \quad \alpha = \frac{1}{7} \quad \alpha = \frac{1}{8} \quad \alpha = \frac{1}{9} \quad \alpha = \frac{1}{10} \quad \alpha = \frac{1}{11} \quad \alpha = \frac{1}{12} \quad \alpha = \frac{1}{13} \quad \alpha = \frac{1}{14} \quad \alpha = \frac{1}{15} \quad \alpha = \frac{1}{16} \quad \alpha = \frac{1}{17} \quad \alpha = \frac{1}{18} \quad \alpha = \frac{1}{19} \quad \alpha = \frac{1}{20} \quad \alpha = \frac{1}{10} \quad \alpha = \frac{1}{10}$ $\beta = \frac{1}{2} \quad \beta = \frac{1}{3} \quad \beta = \frac{1}{4} \quad \beta = \frac{1}{5} \quad \beta = \frac{1}{6} \quad \beta = \frac{1}{7} \quad \beta = \frac{1}{8} \quad \beta = \frac{1}{9} \quad \beta = \frac{1}{10} \quad \beta = \frac{1}{11} \quad \beta = \frac{1}{12} \quad \beta = \frac{1}{13} \quad \beta = \frac{1}{14} \quad \beta = \frac{1}{15} \quad \beta = \frac{1}{16} \quad \beta = \frac{1}{17} \quad \beta = \frac{1}{18} \quad \beta = \frac{1}{19} \quad \beta = \frac{1}{20} \quad \beta = \frac{1}{10} \quad \beta = \frac{1}{10}$ included $\alpha = 8 \quad \alpha = 9 \quad \alpha = 10 \quad \alpha = 11 \quad \alpha = 12 \quad \alpha = 13 \quad \alpha = 14 \quad \alpha = 15 \quad \alpha = 16 \quad \alpha = 17 \quad \alpha = 18 \quad \alpha = 19 \quad \alpha = 20$ $\beta = 1 \quad \beta =$ middle $\alpha = 4 \quad \alpha = 5 \quad \alpha = 6 \quad \alpha = 7 \quad \alpha = 8 \quad \alpha = 9 \quad \alpha = 10 \quad \alpha = 11 \quad \alpha = 12 \quad \alpha = 13 \quad \alpha = 14 \quad \alpha = 15 \quad \alpha = 16 \quad \alpha = 17 \quad \alpha = 18 \quad \alpha = 19 \quad \alpha = 20 \quad \alpha = 10 \quad \alpha = 10$ $\beta = 2 \quad \beta = 3 \quad \beta = 4 \quad \beta = 5 \quad \beta = 6 \quad \beta = 7 \quad \beta = 8 \quad \beta = 9 \quad \beta = 10 \quad \beta = 11 \quad \beta = 12 \quad \beta = 13 \quad \beta = 14 \quad \beta = 15 \quad \beta = 16 \quad \beta = 17 \quad \beta = 18 \quad \beta = 19 \quad \beta = 20 \quad \beta = 10 \quad$

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