Quality Control Using Convolutional Neural Networks Applied to Samples of Very Small Size

Supplement 2

Plots of the Probabilities for Rejection of Quality Control Functions

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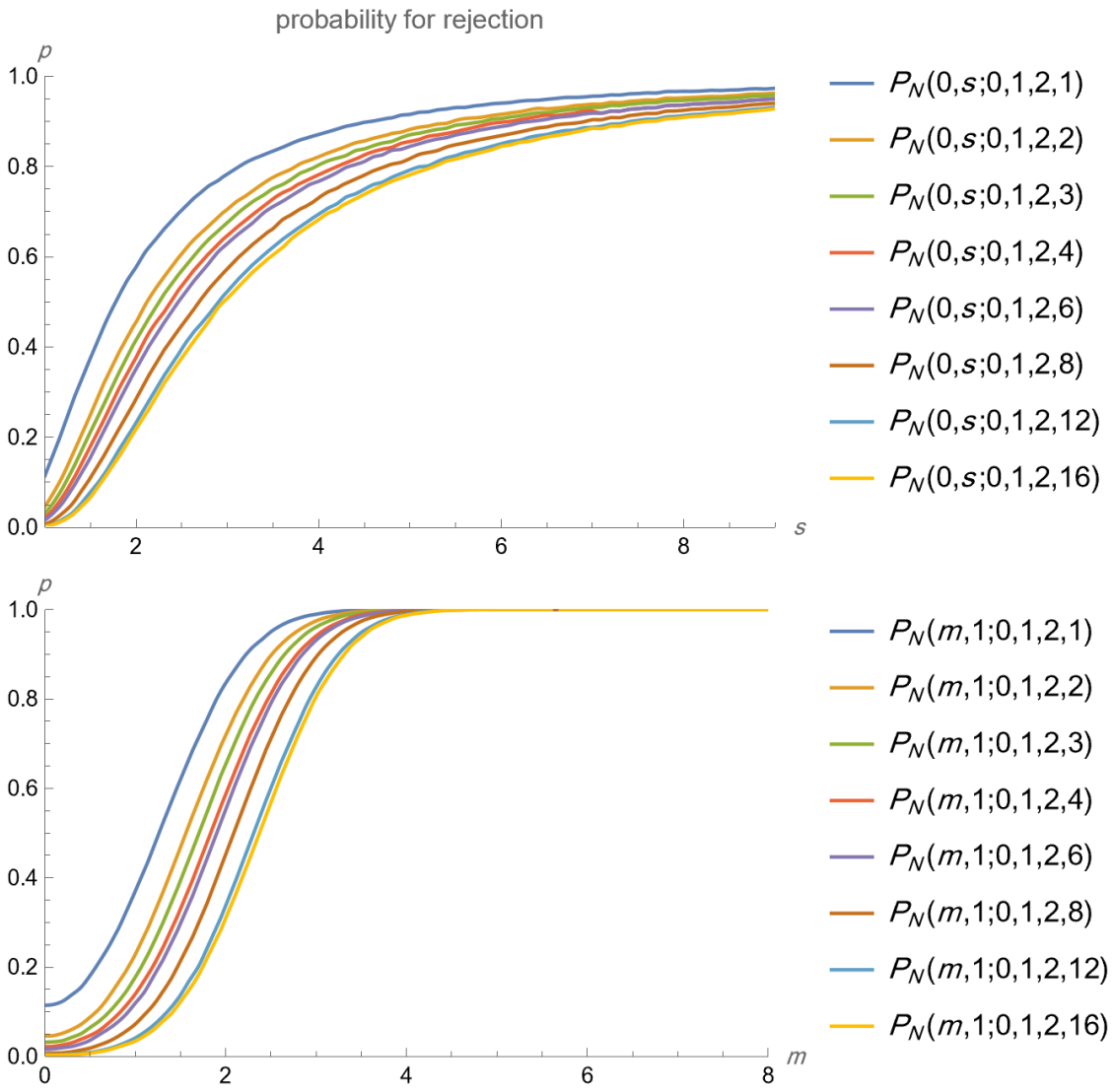
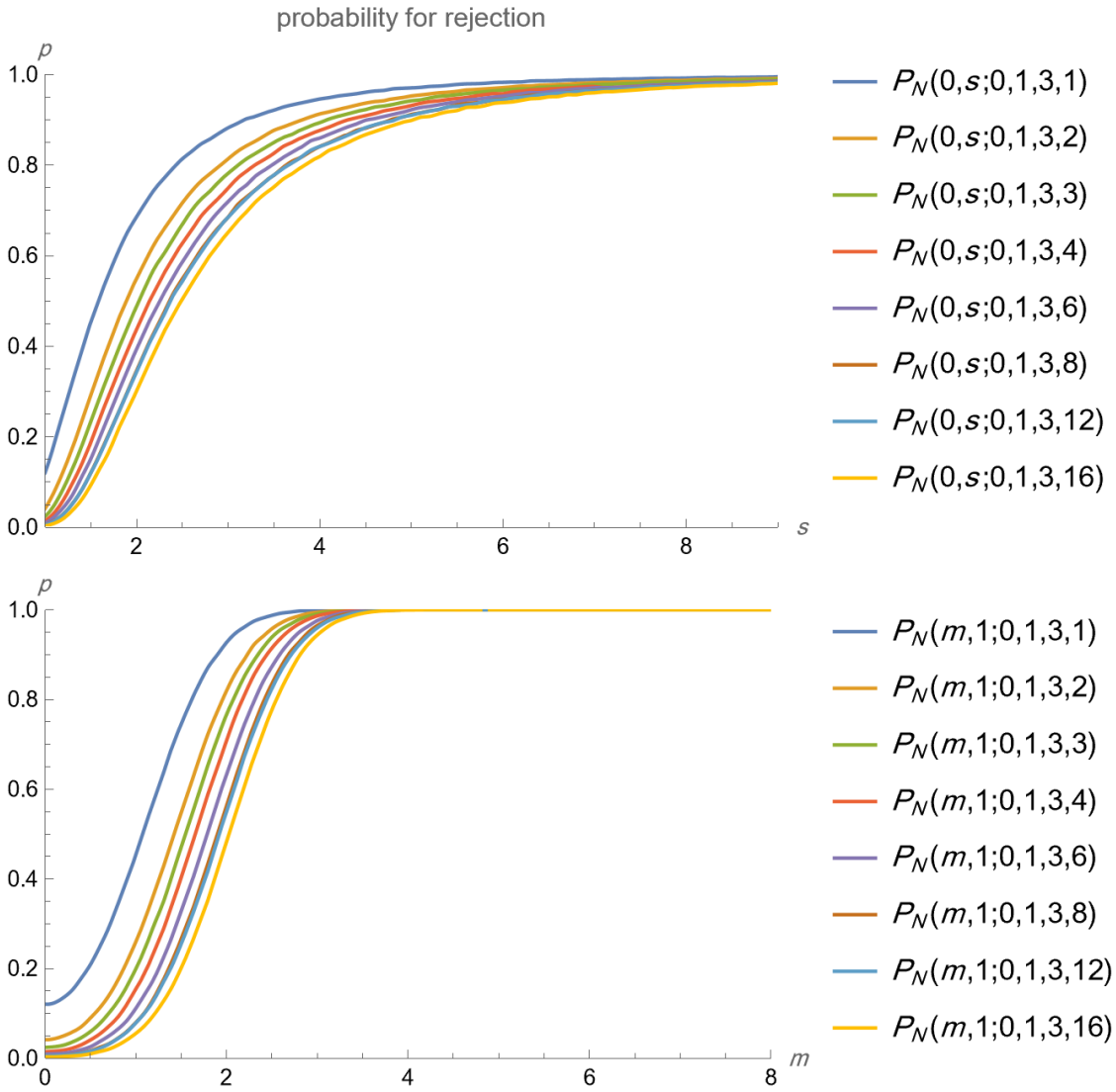


Figure 1: Plots of $P_N(0,1;0,1,2,a)$ *for* $a \in \{1,2,3,4,6,8,12,16\}$



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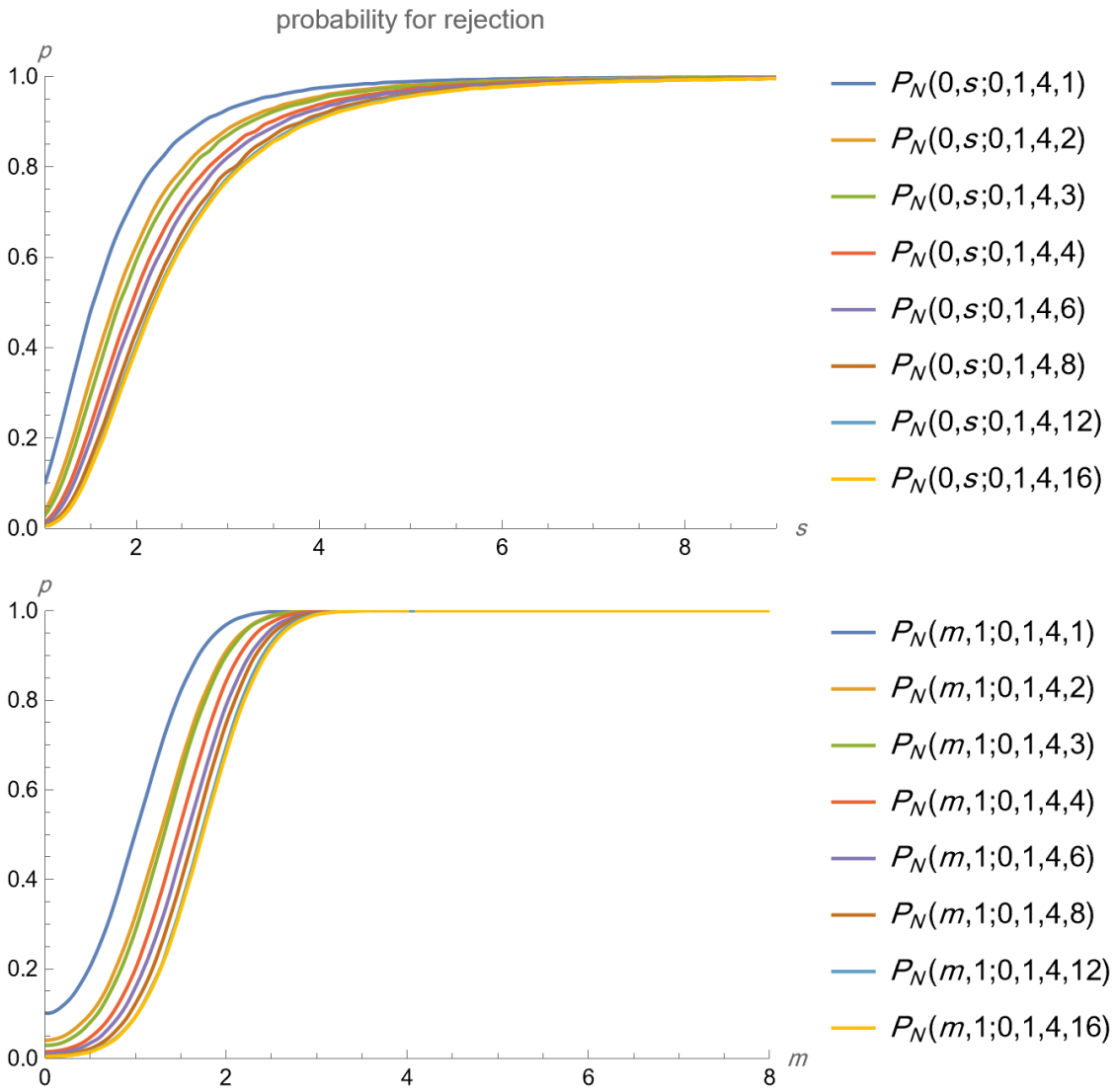

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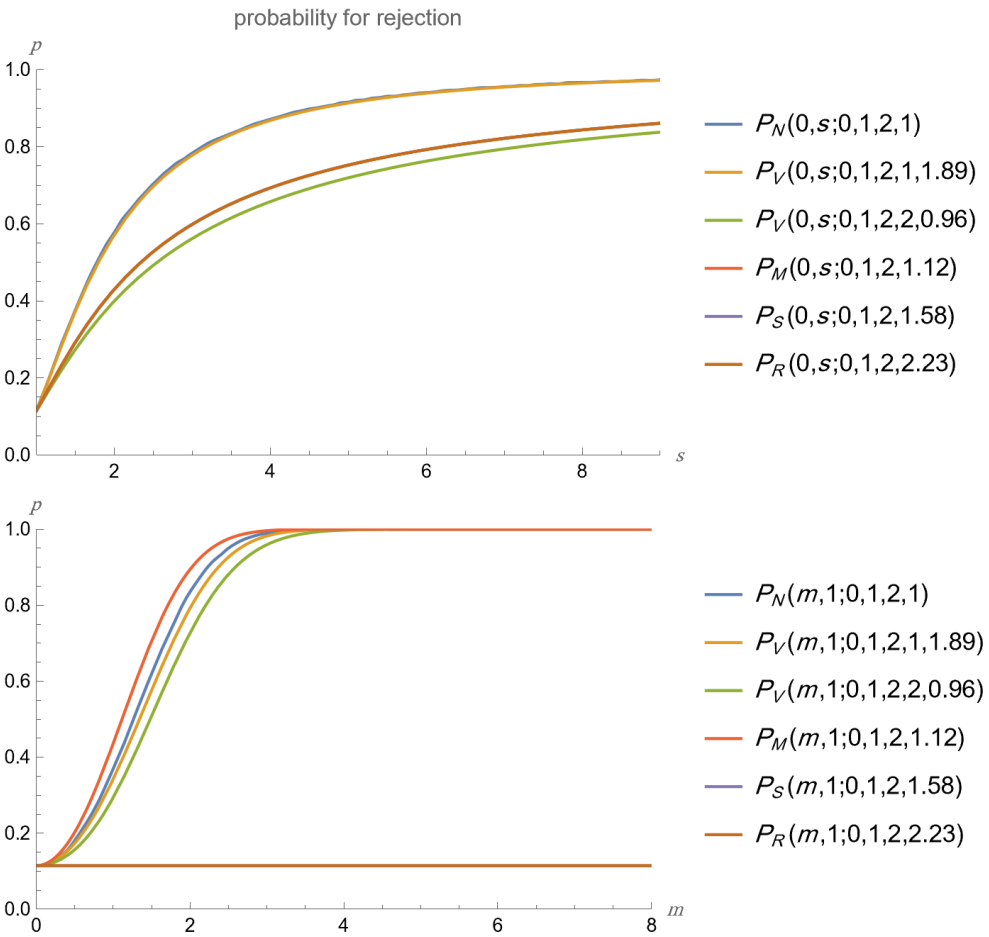

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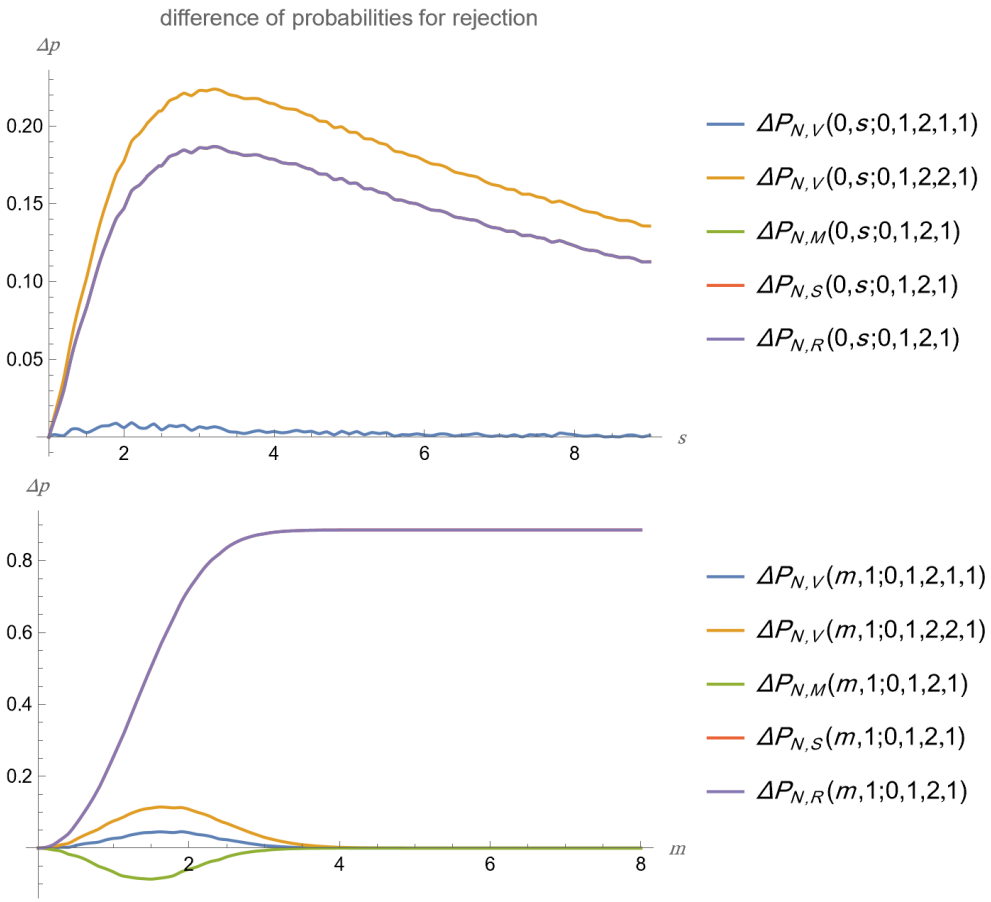

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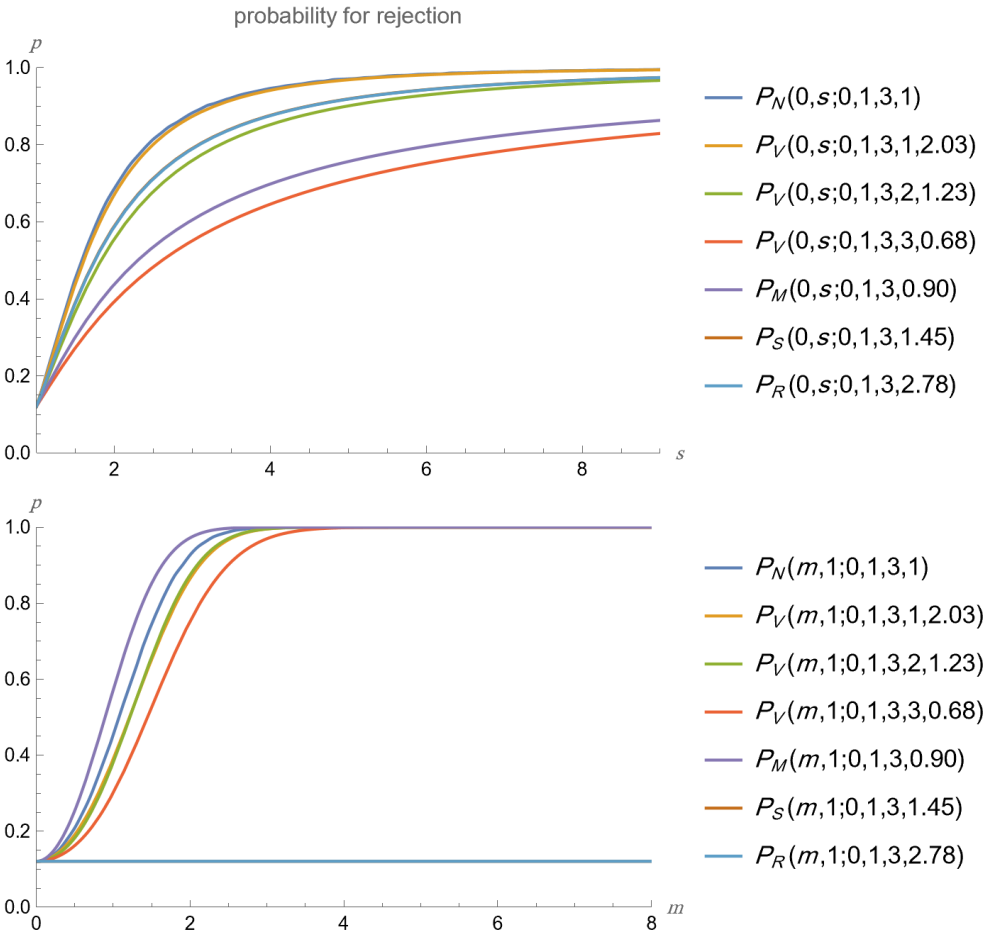

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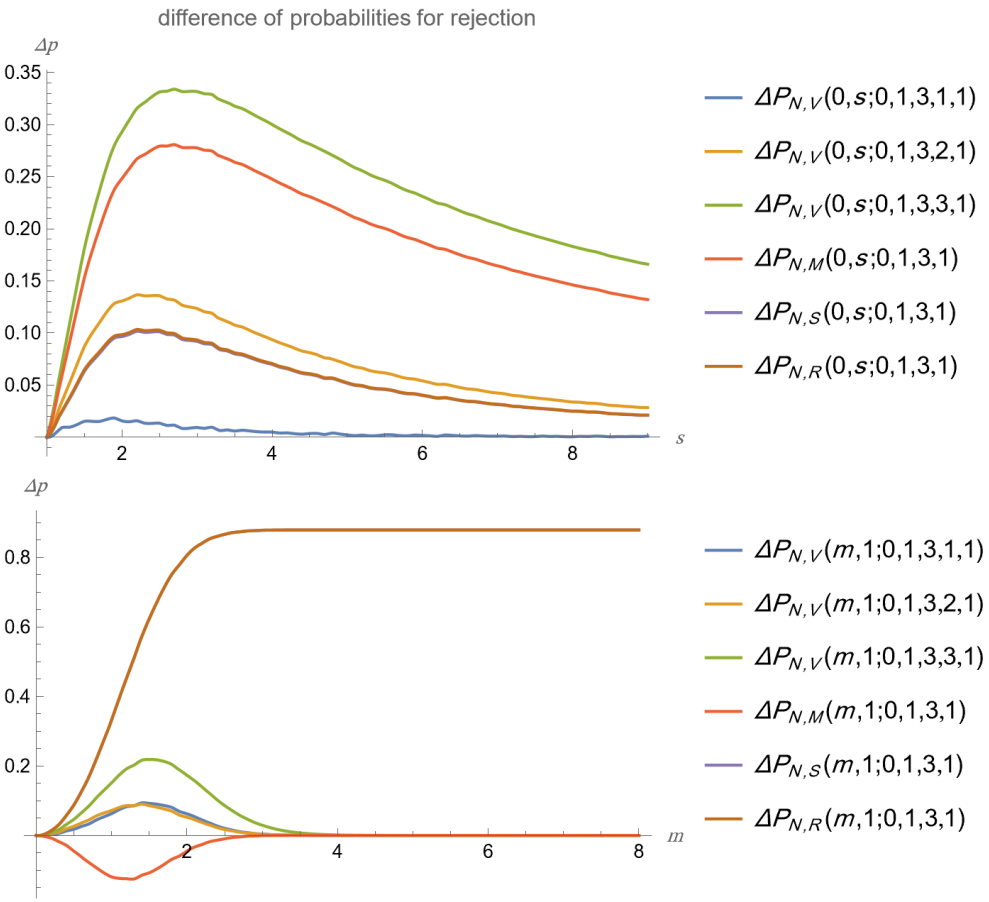

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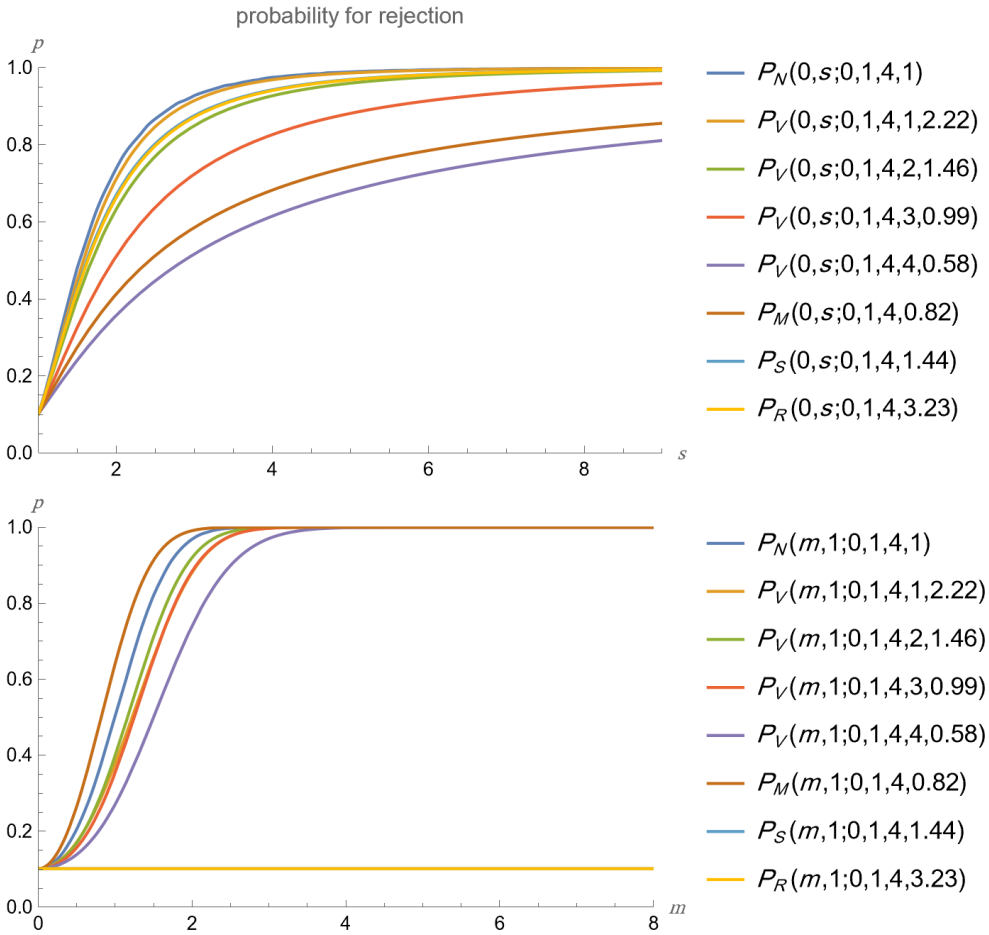

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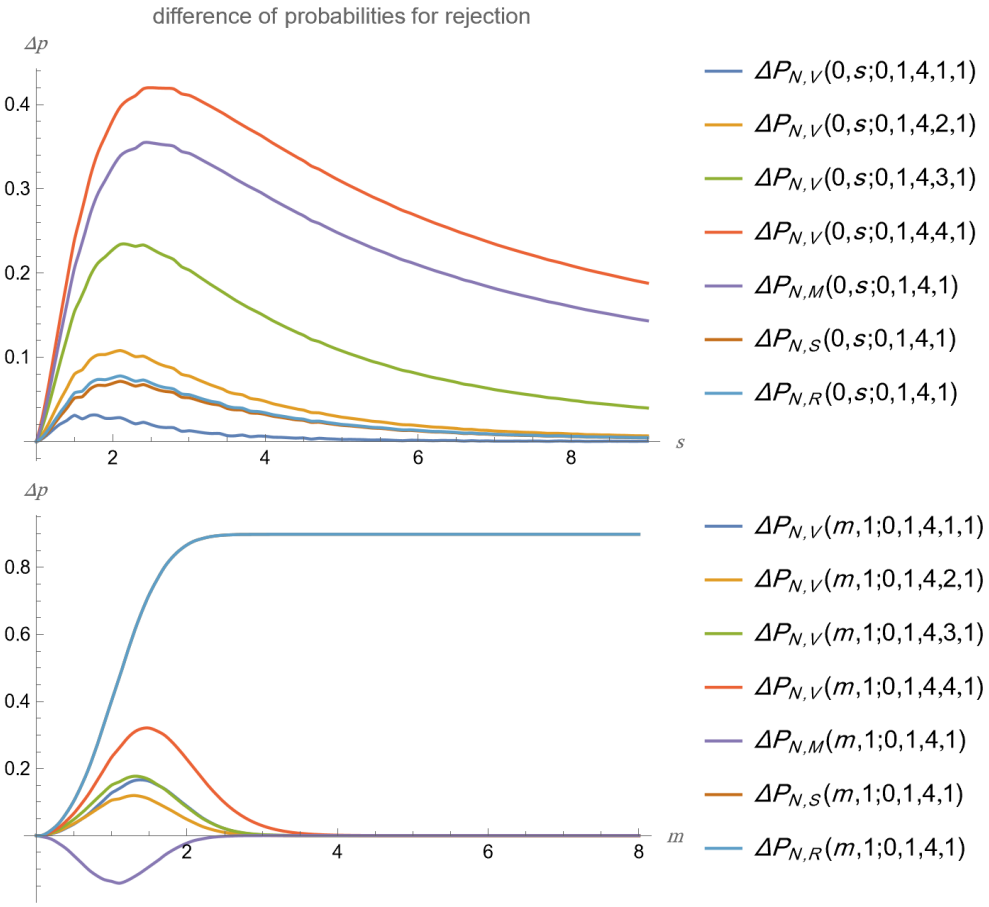

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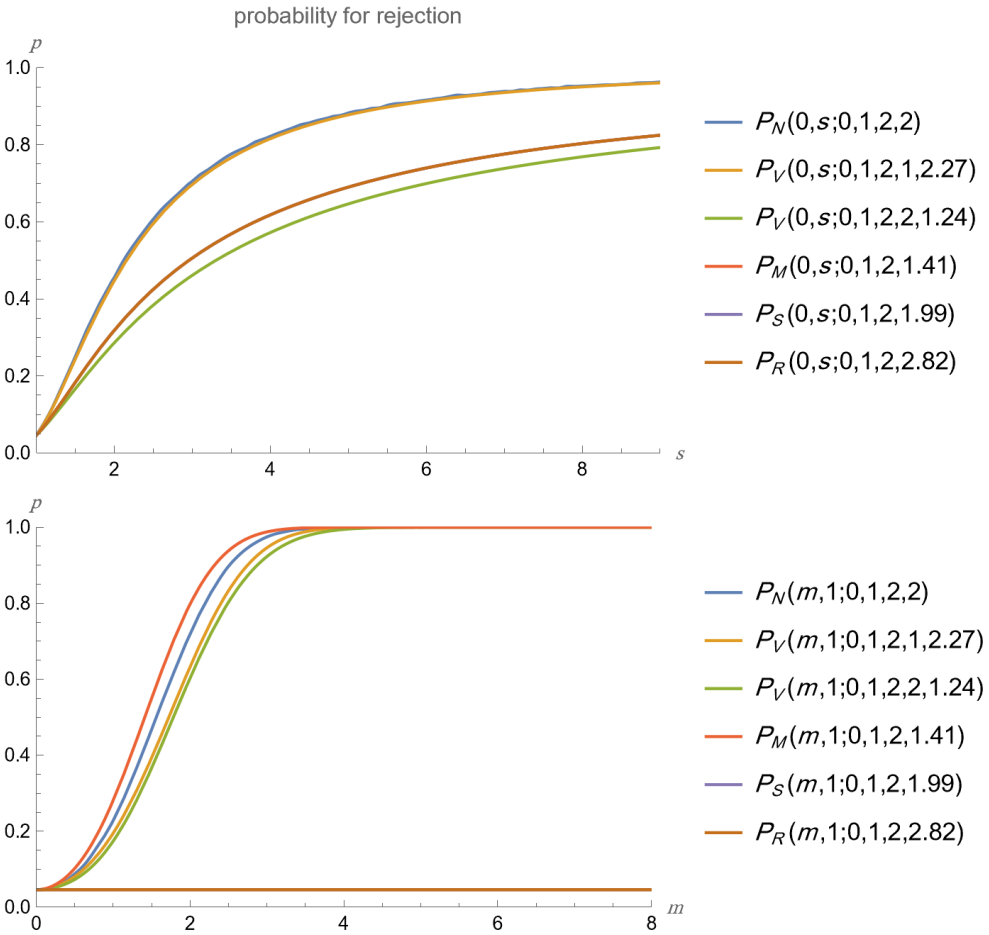

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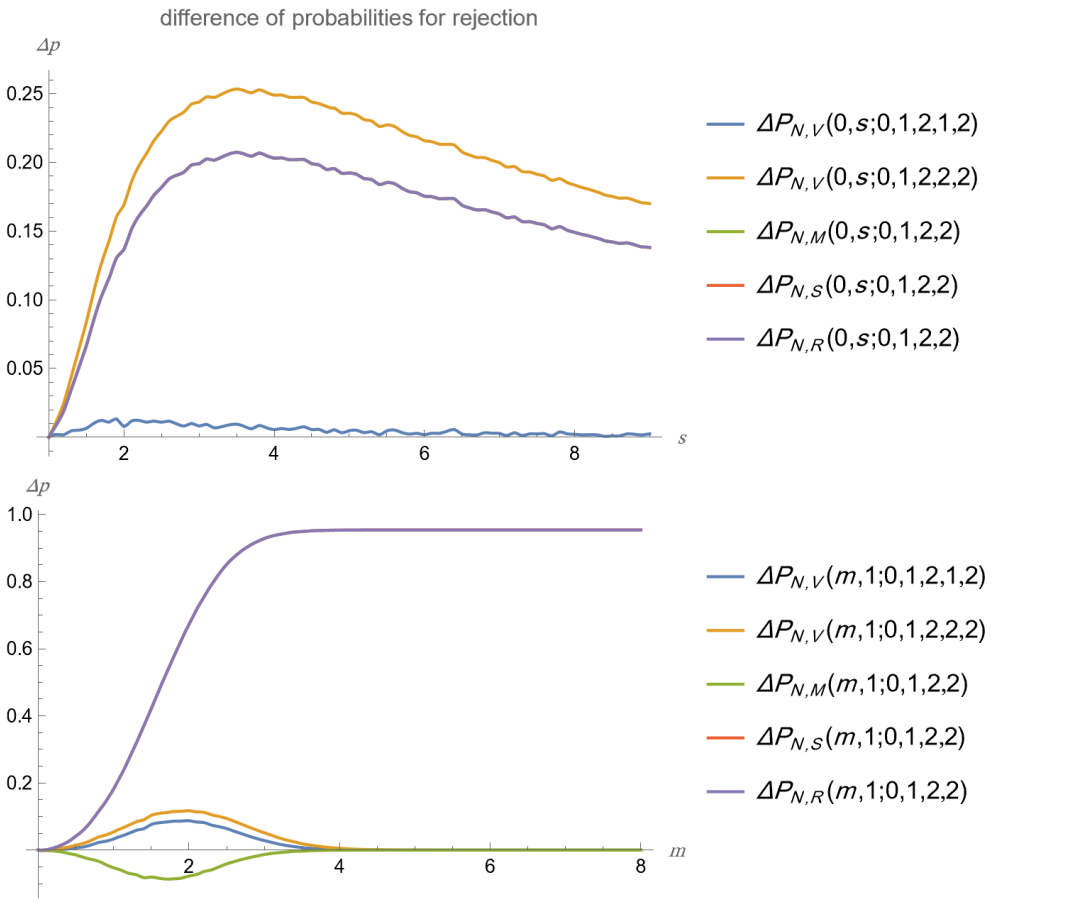

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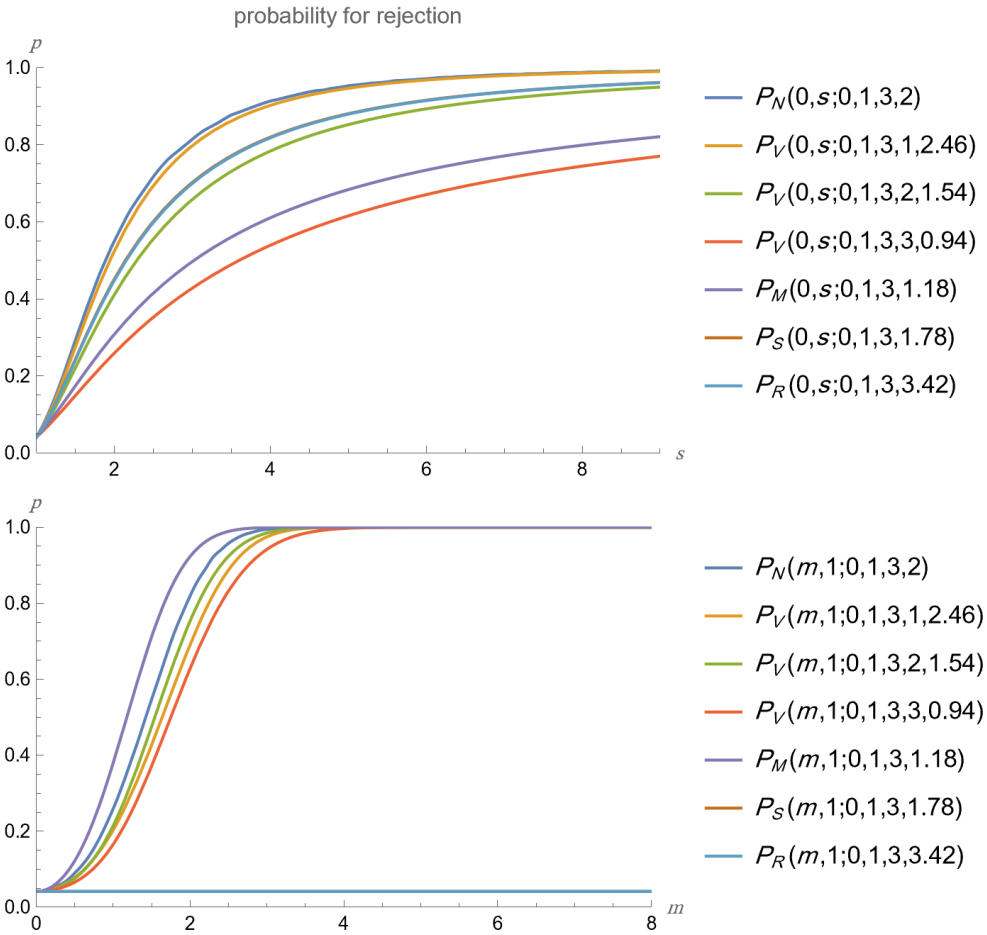

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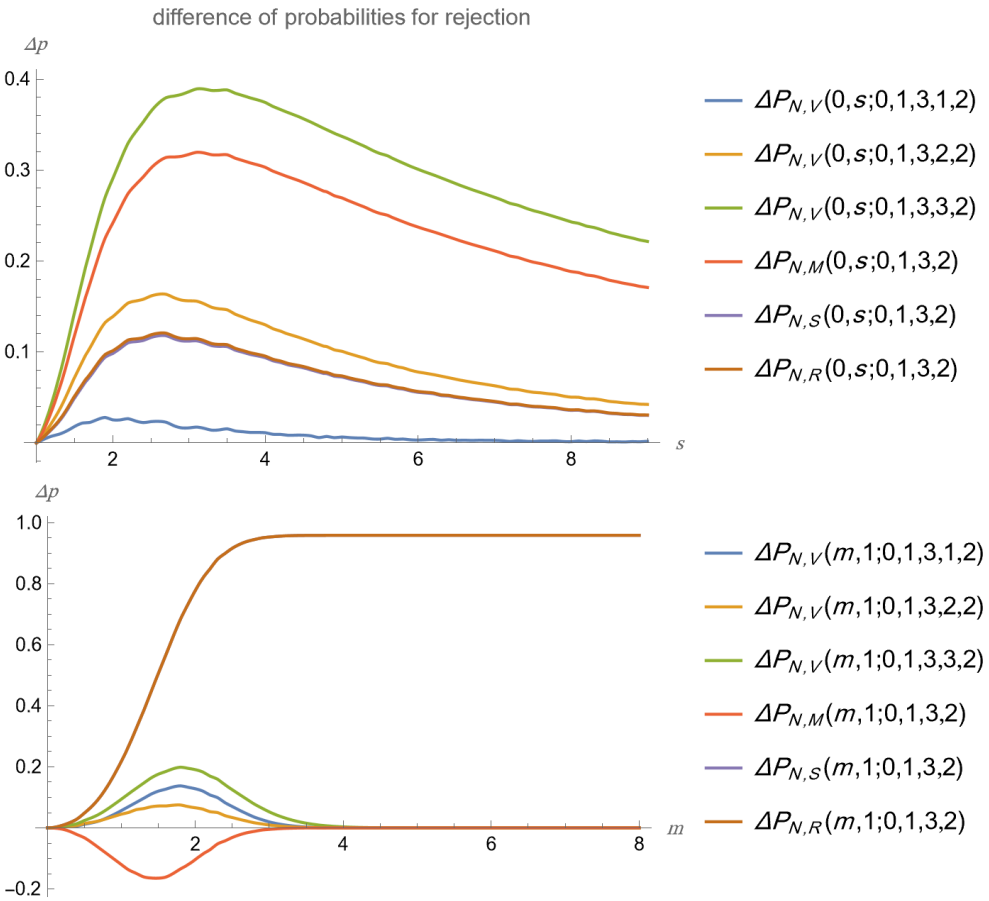

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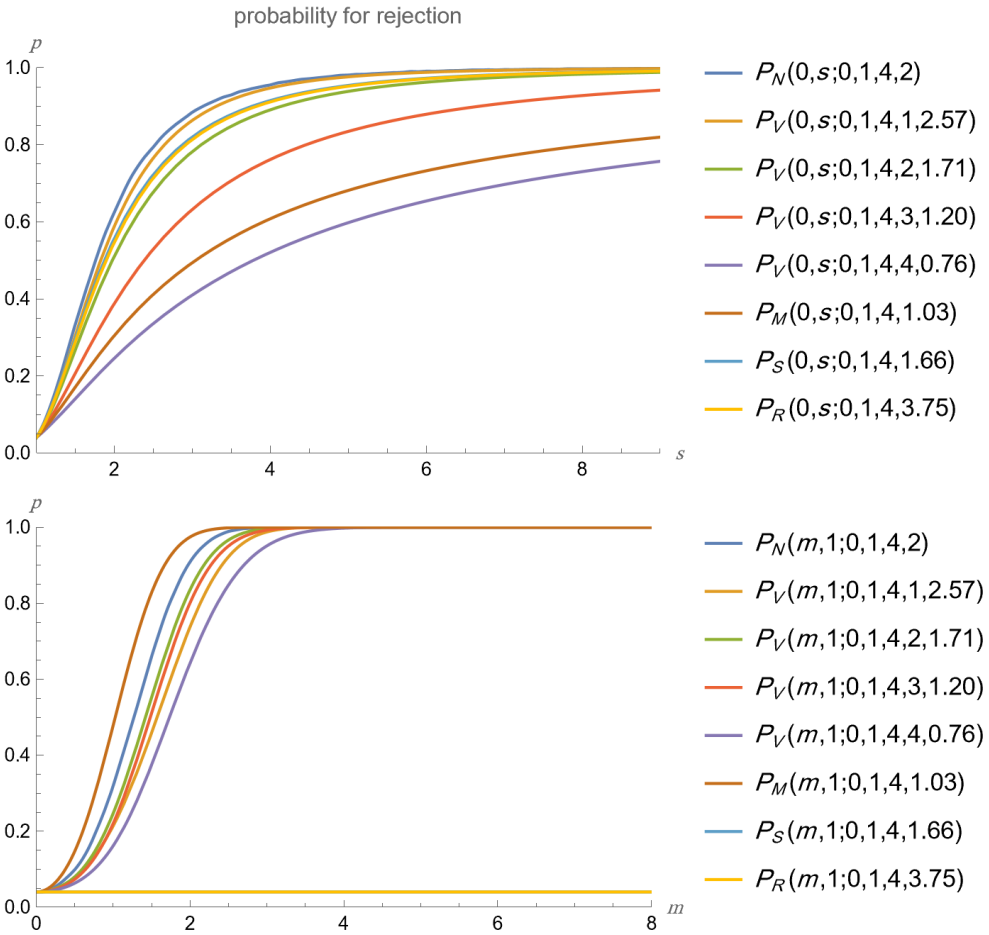

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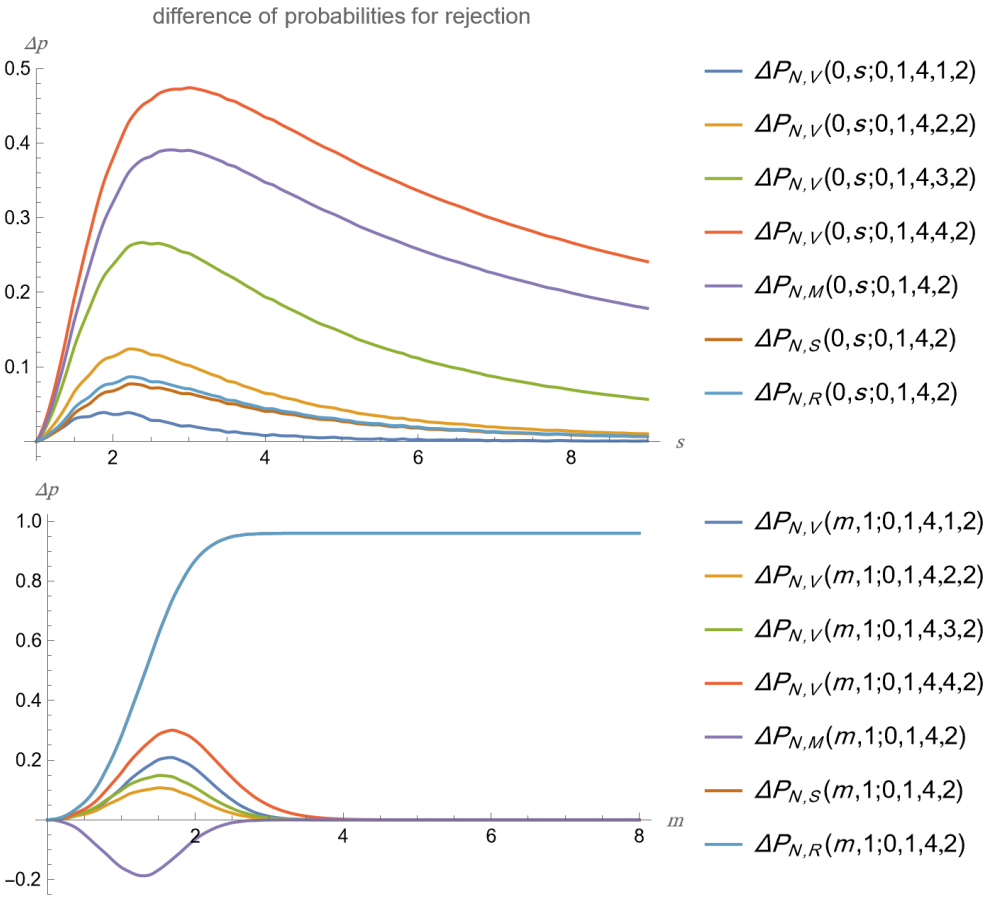

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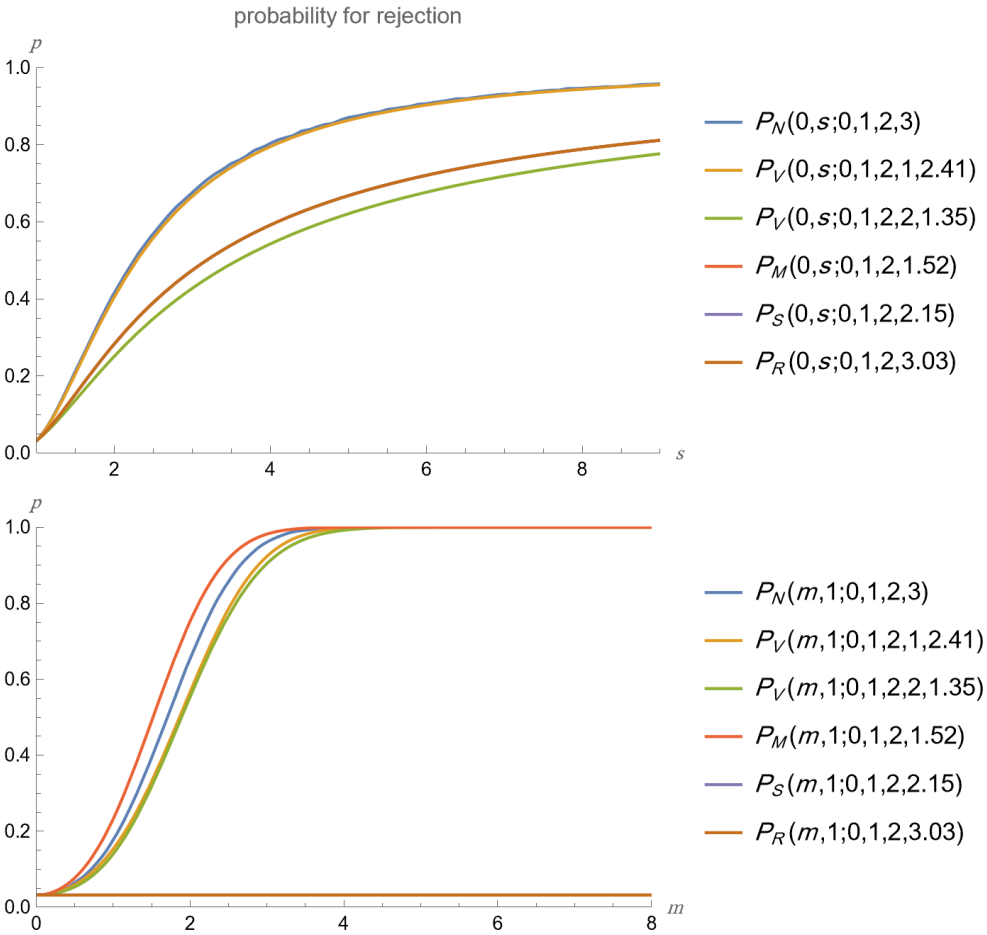

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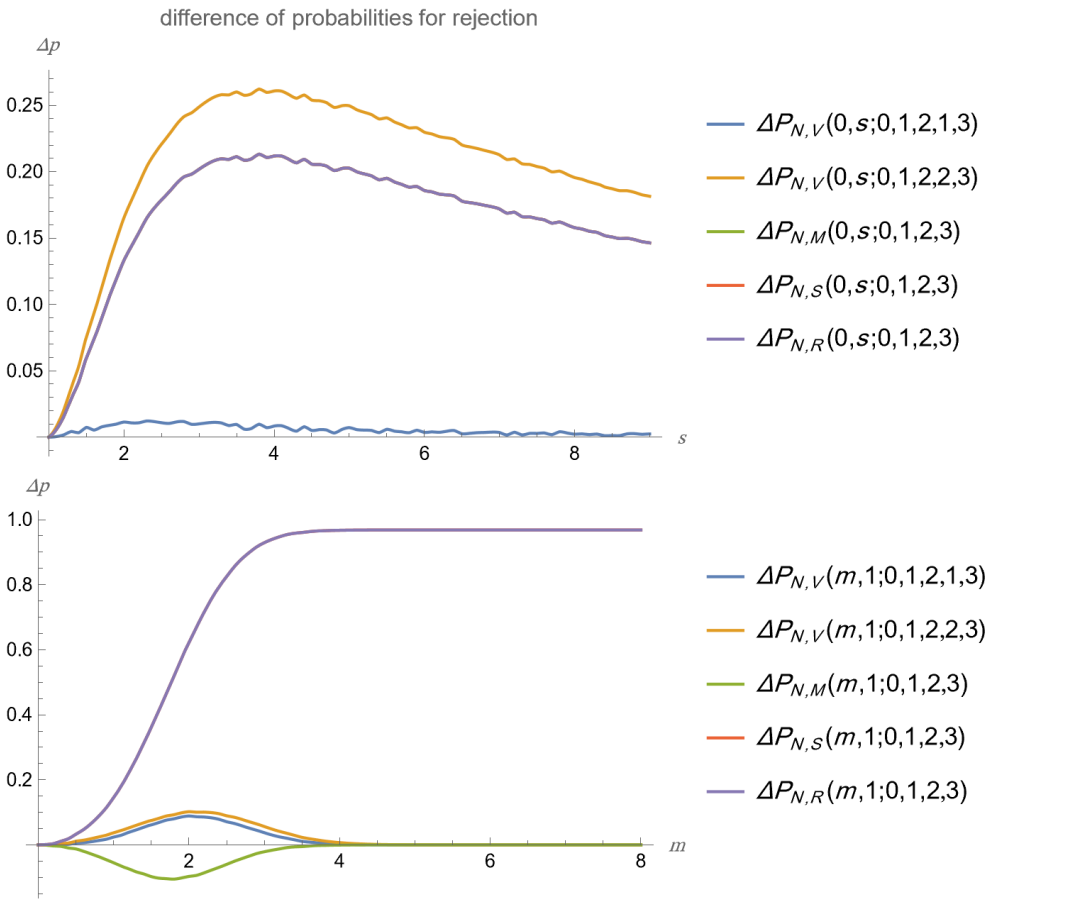

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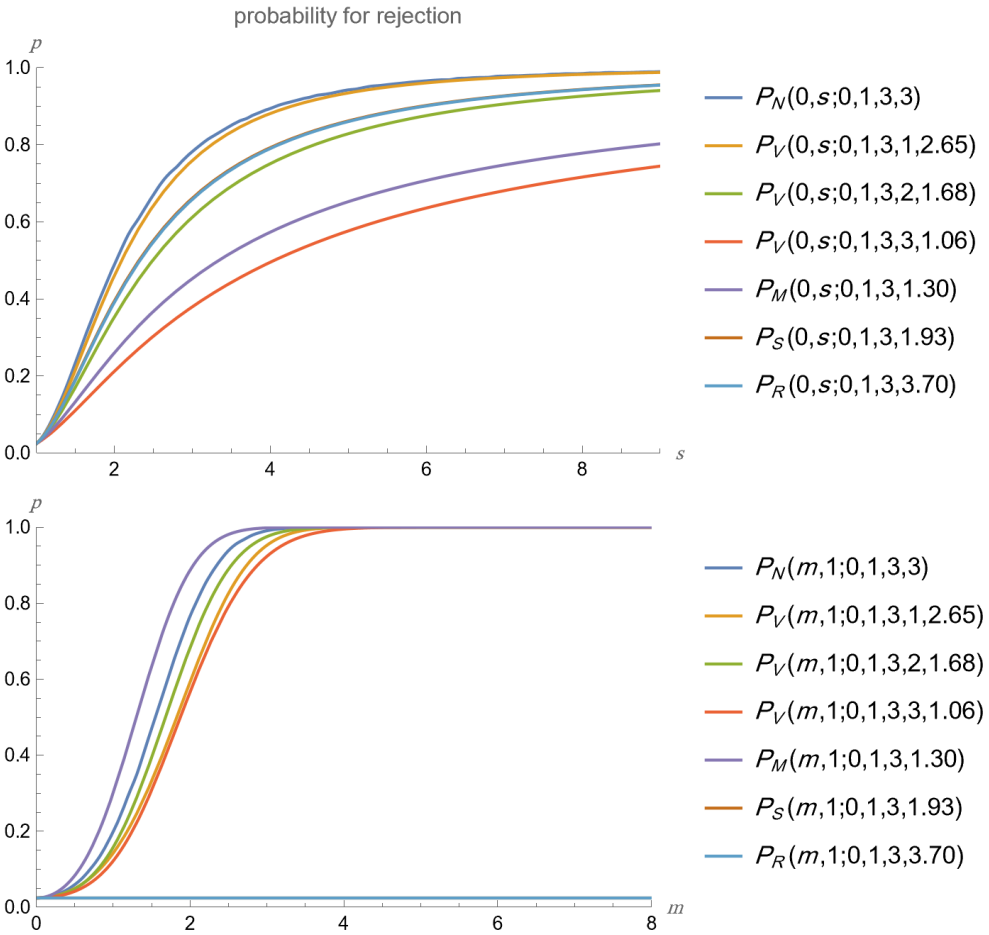
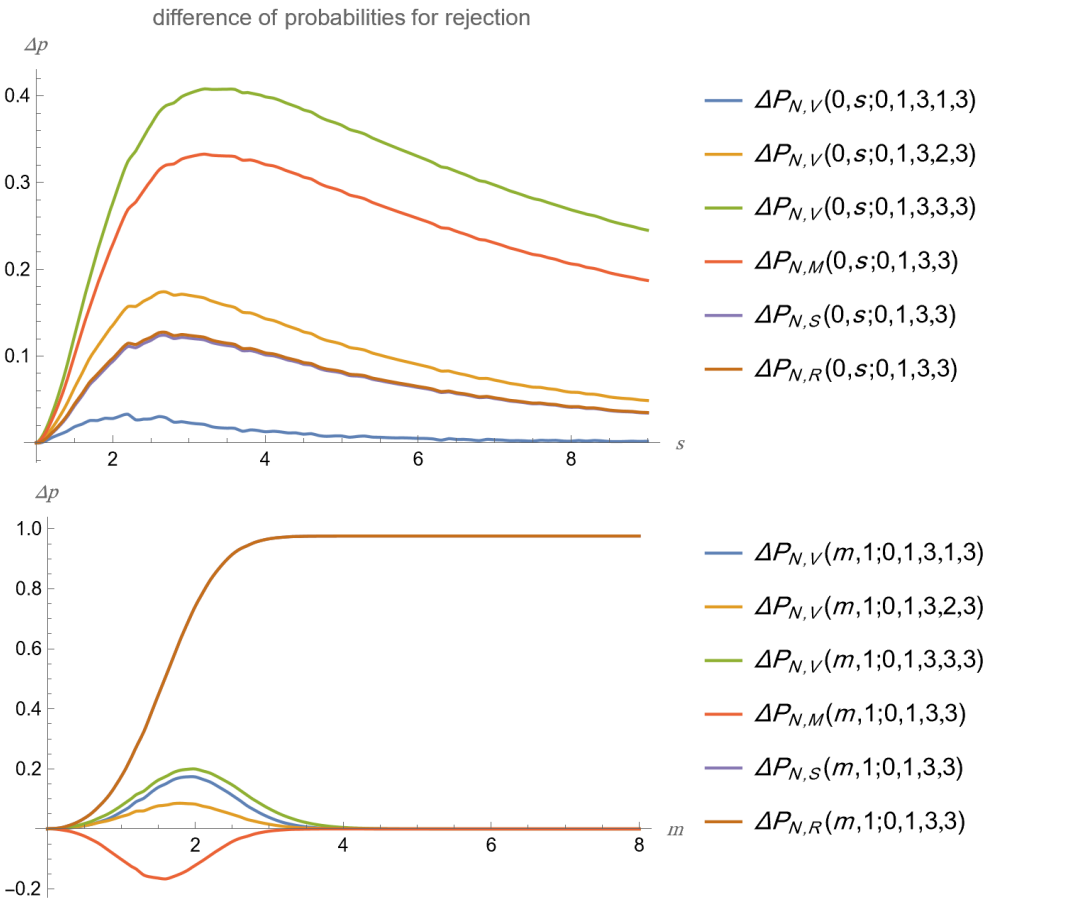


Figure 18: Plots of the probabilities for rejection, for $n = 3$ and $a = 3$



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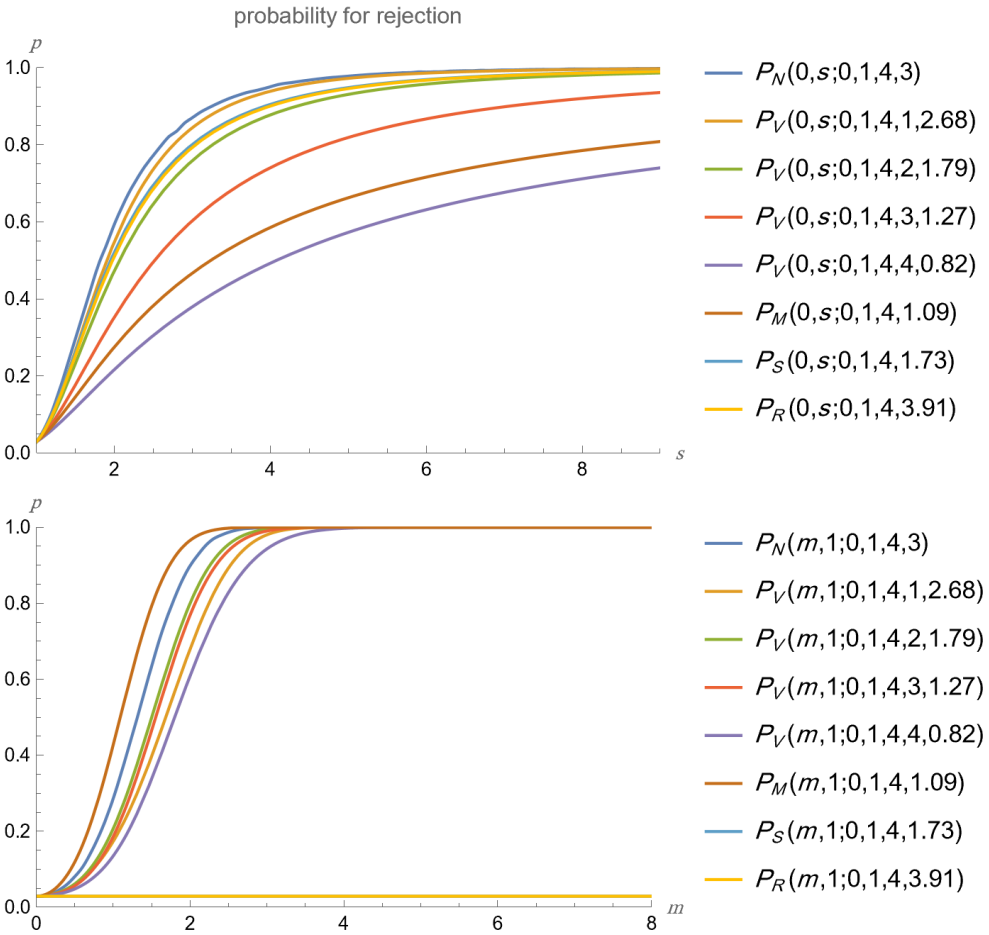
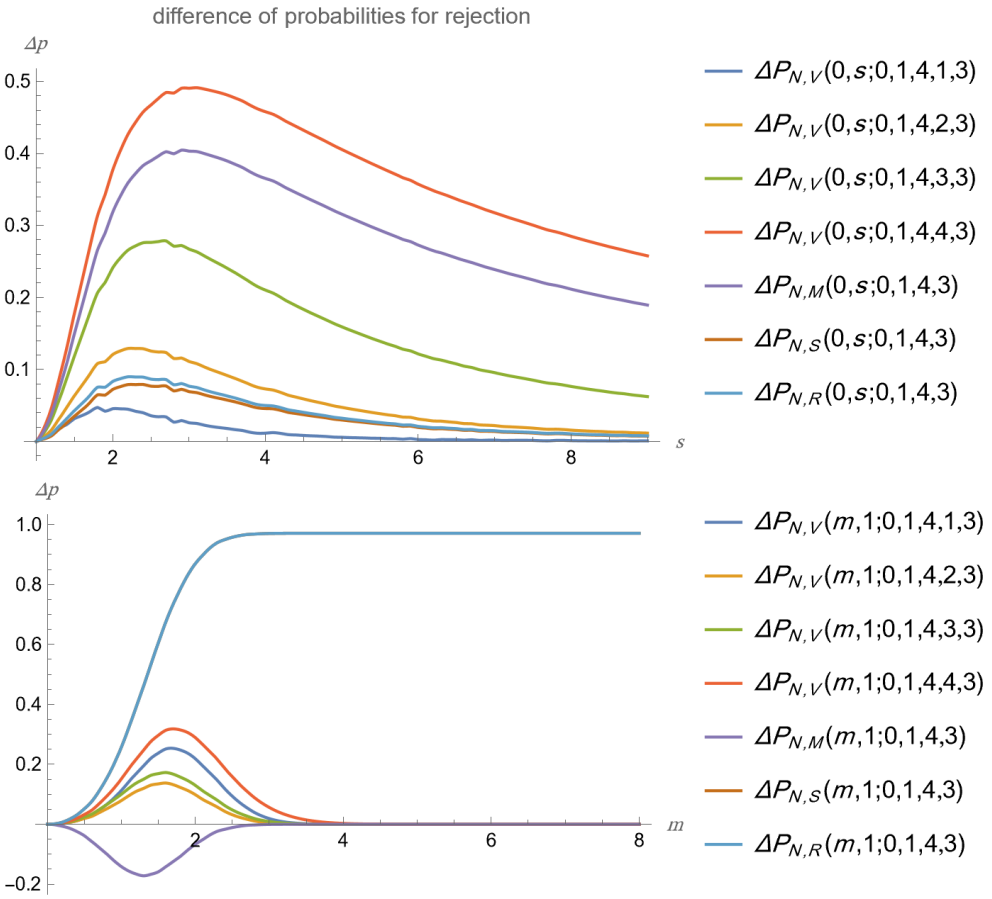


Figure 20: Plots of the probabilities for rejection, for $n = 4$ and $a = 3$



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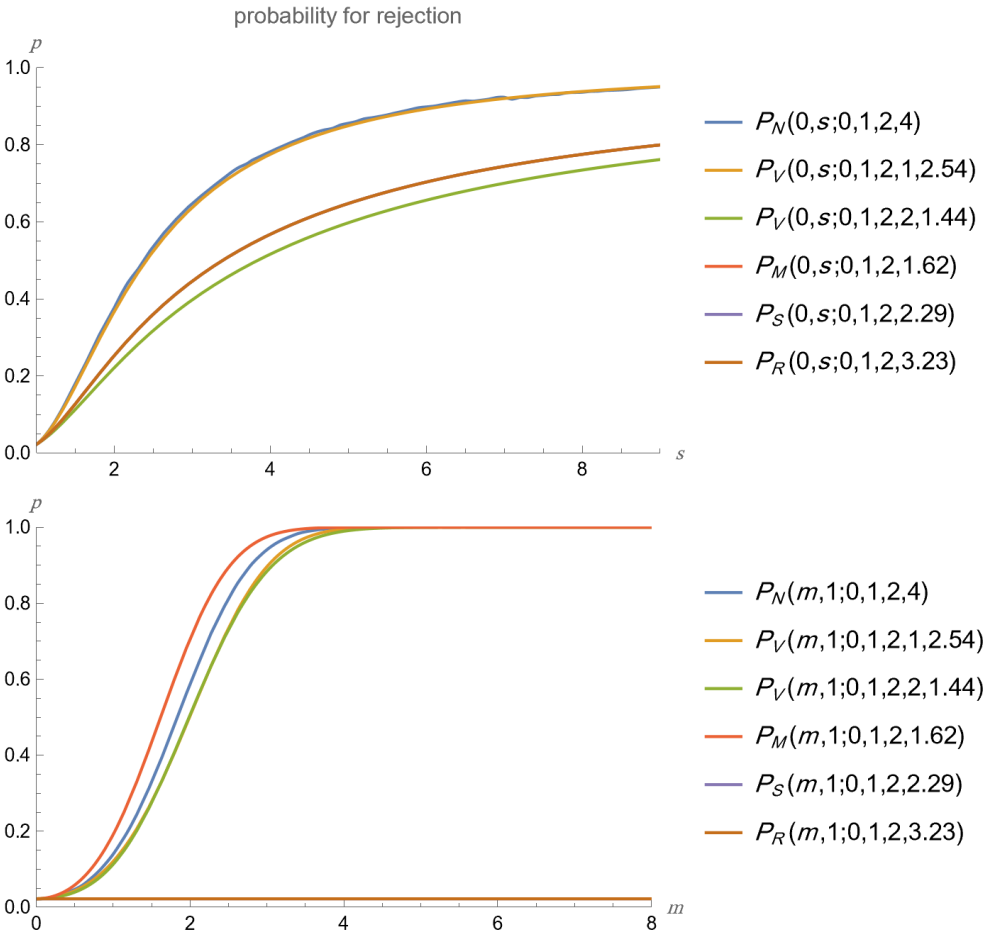
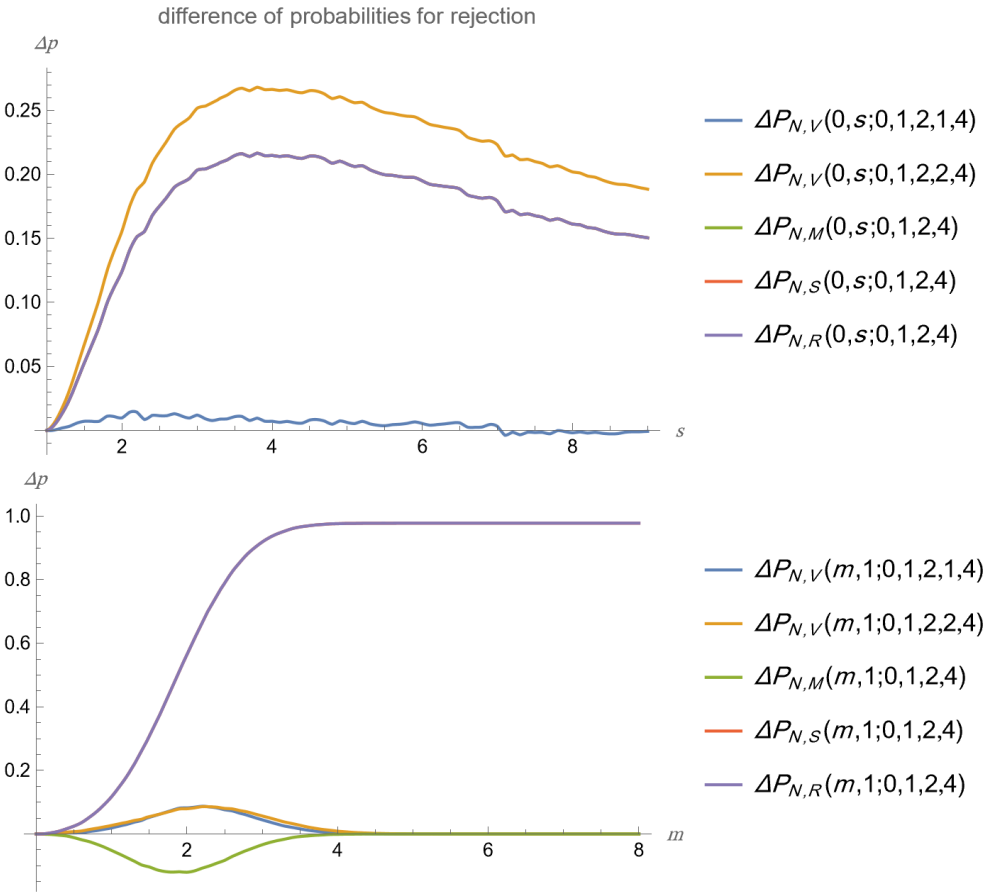


Figure 22: Plots of the probabilities for rejection, for $n = 2$ and $a = 4$



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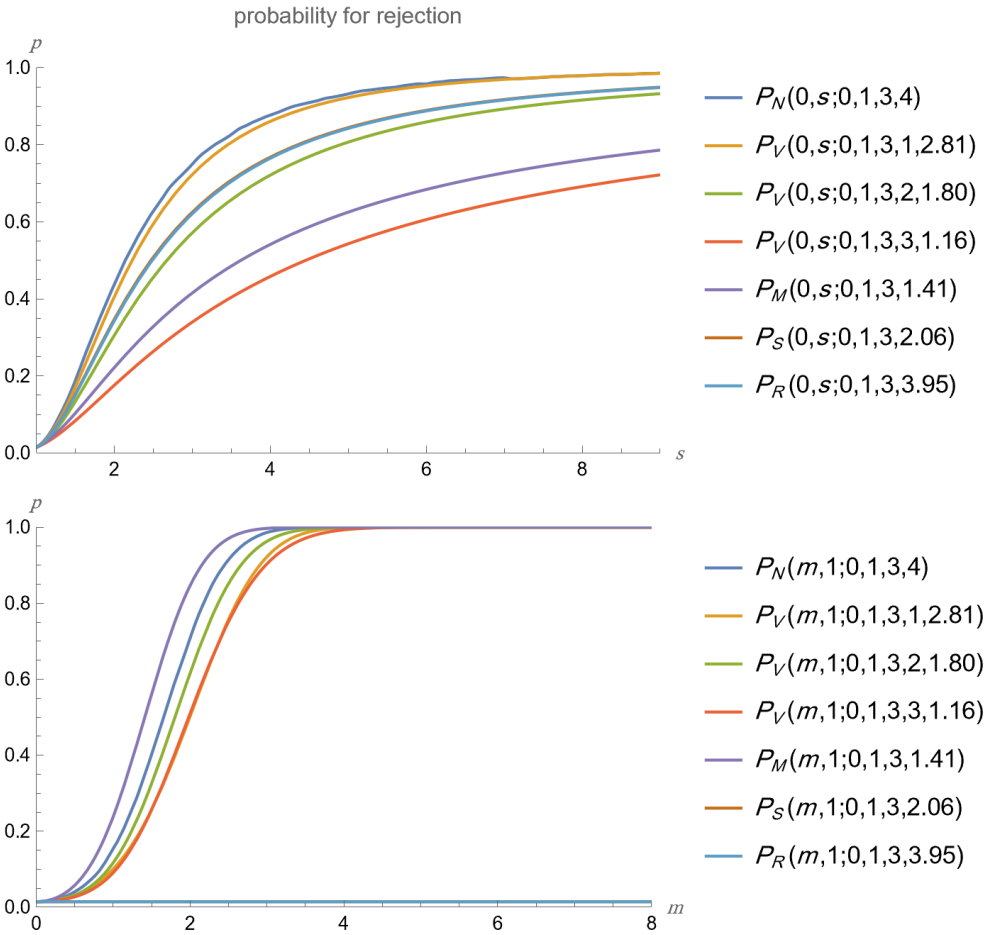

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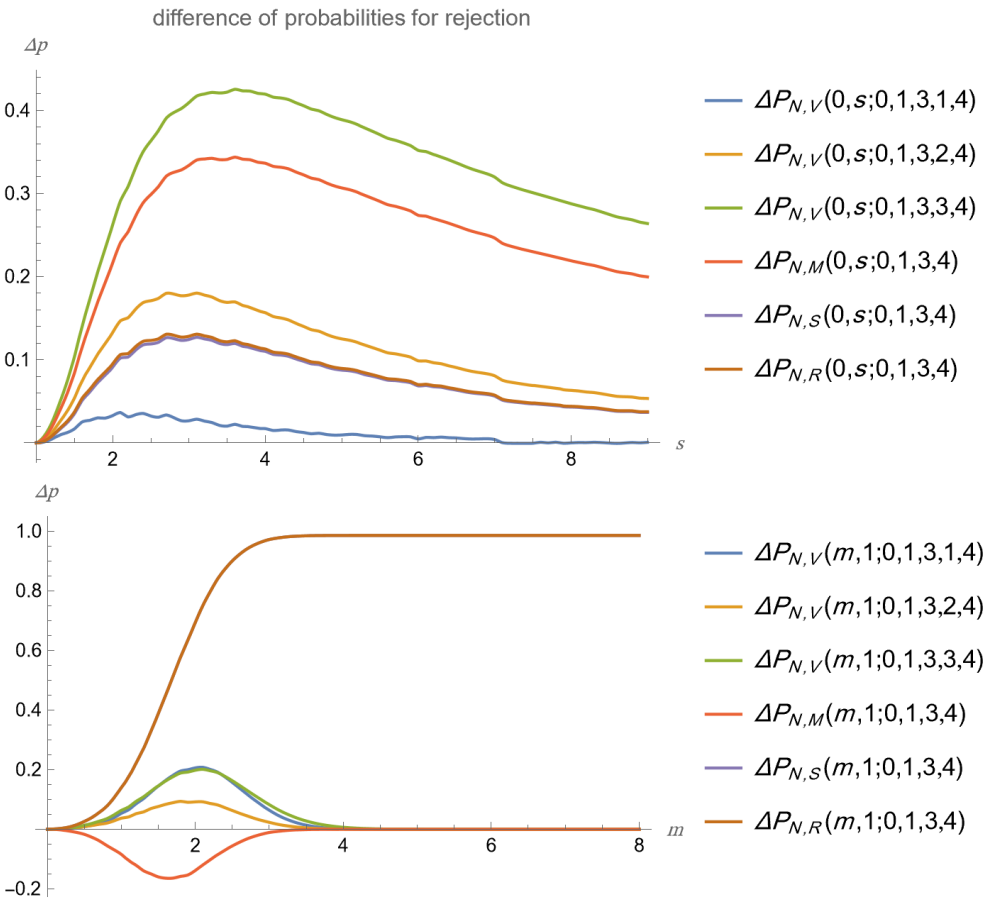

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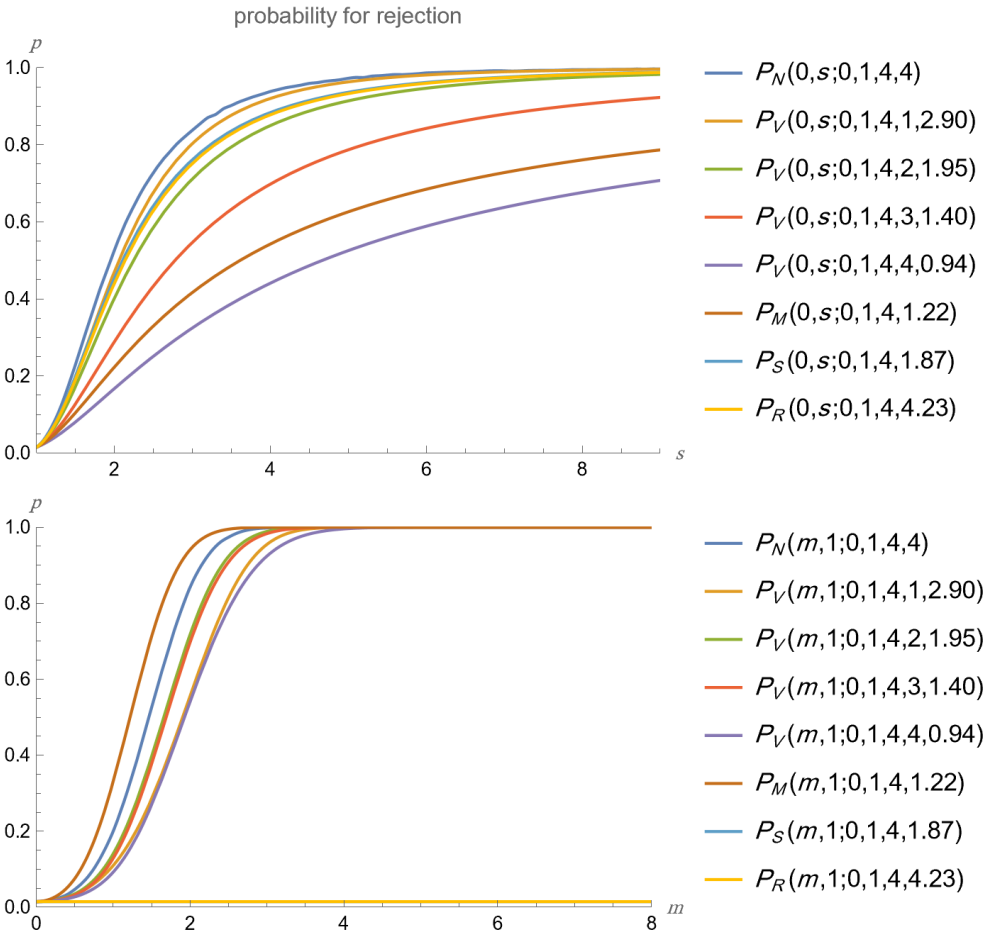
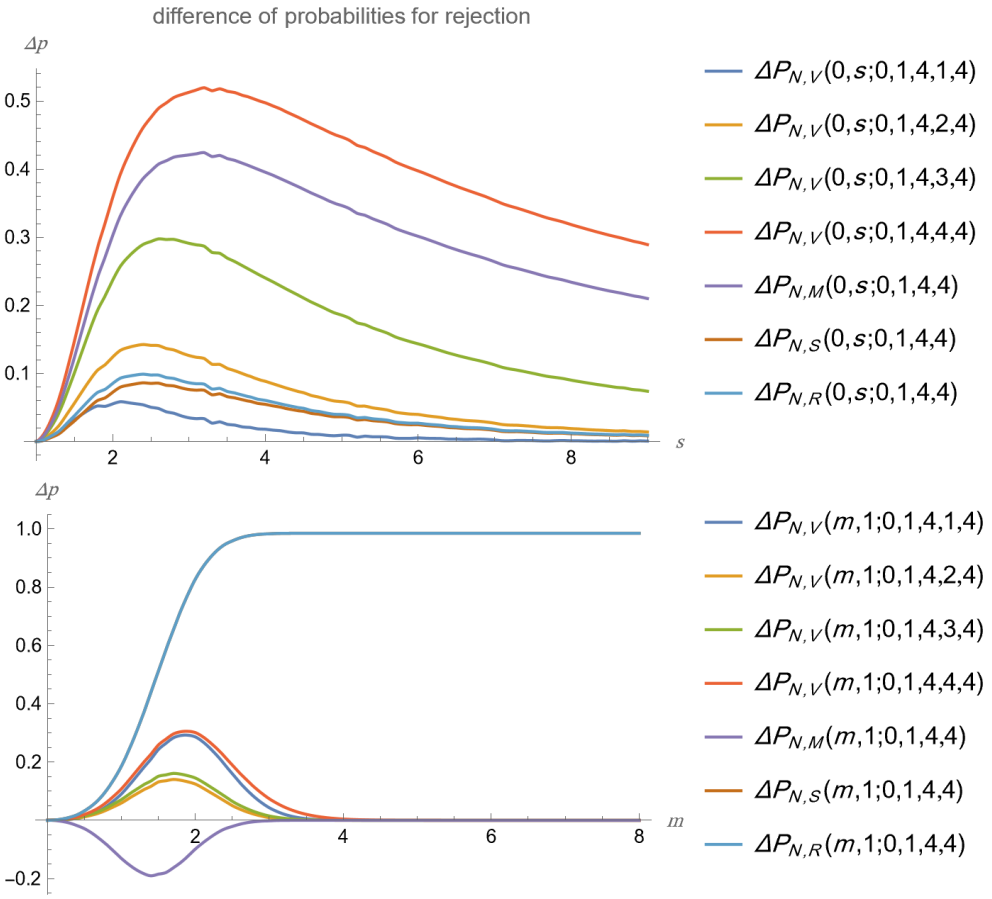


Figure 26: Plots of the probabilities for rejection, for $n = 4$ and $a = 4$



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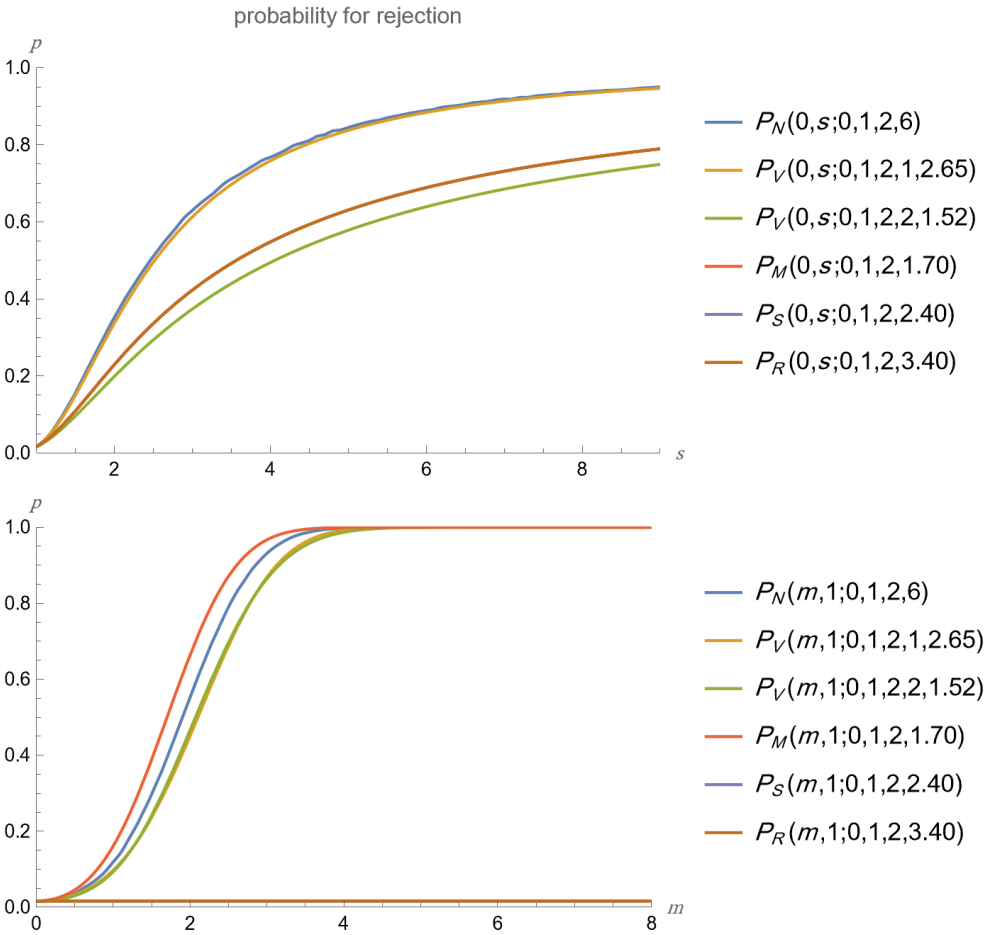
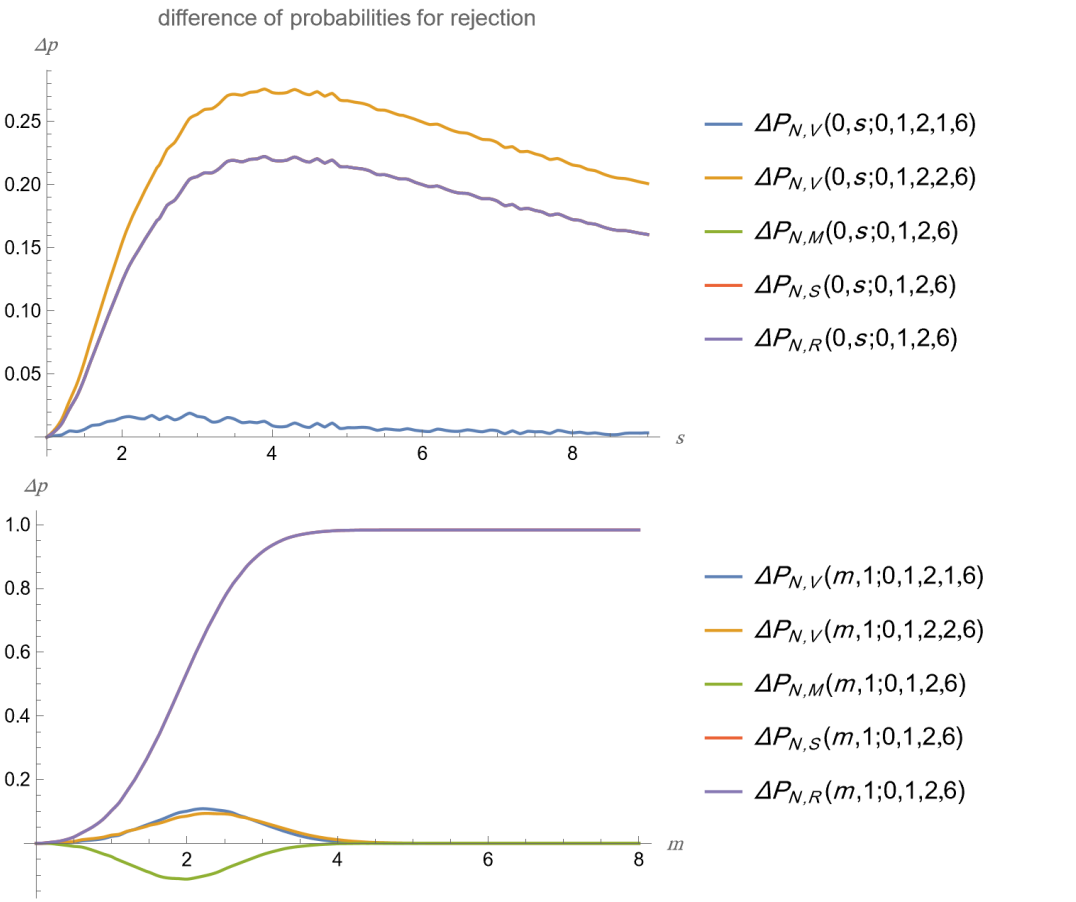


Figure 28: Plots of the probabilities for rejection, for $n = 2$ and $a = 6$



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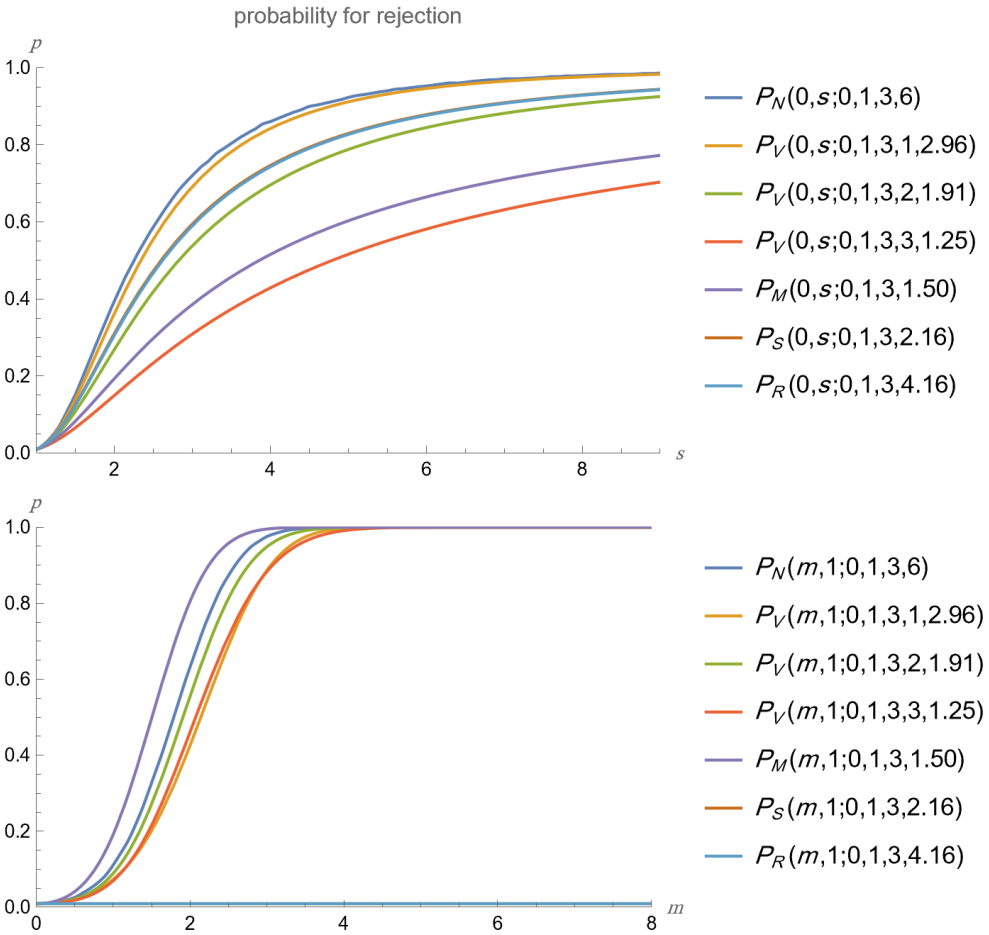
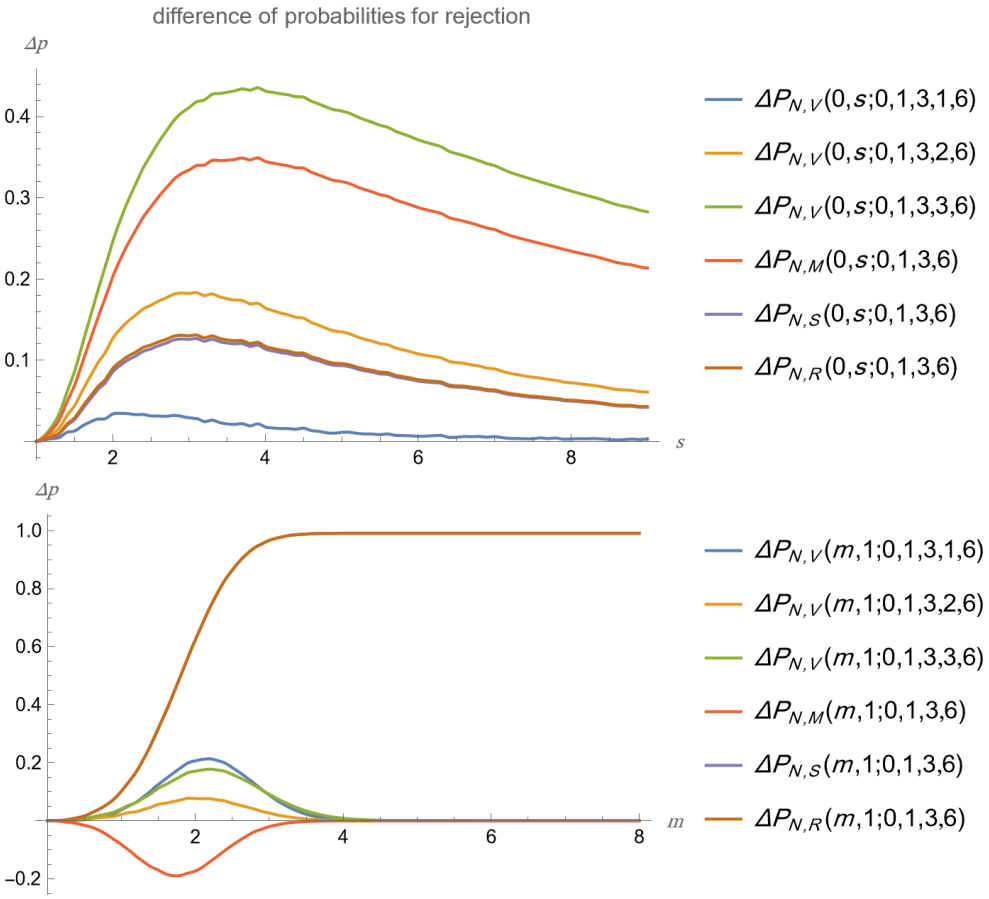


Figure 30: Plots of the probabilities for rejection, for $n = 3$ and $a = 6$



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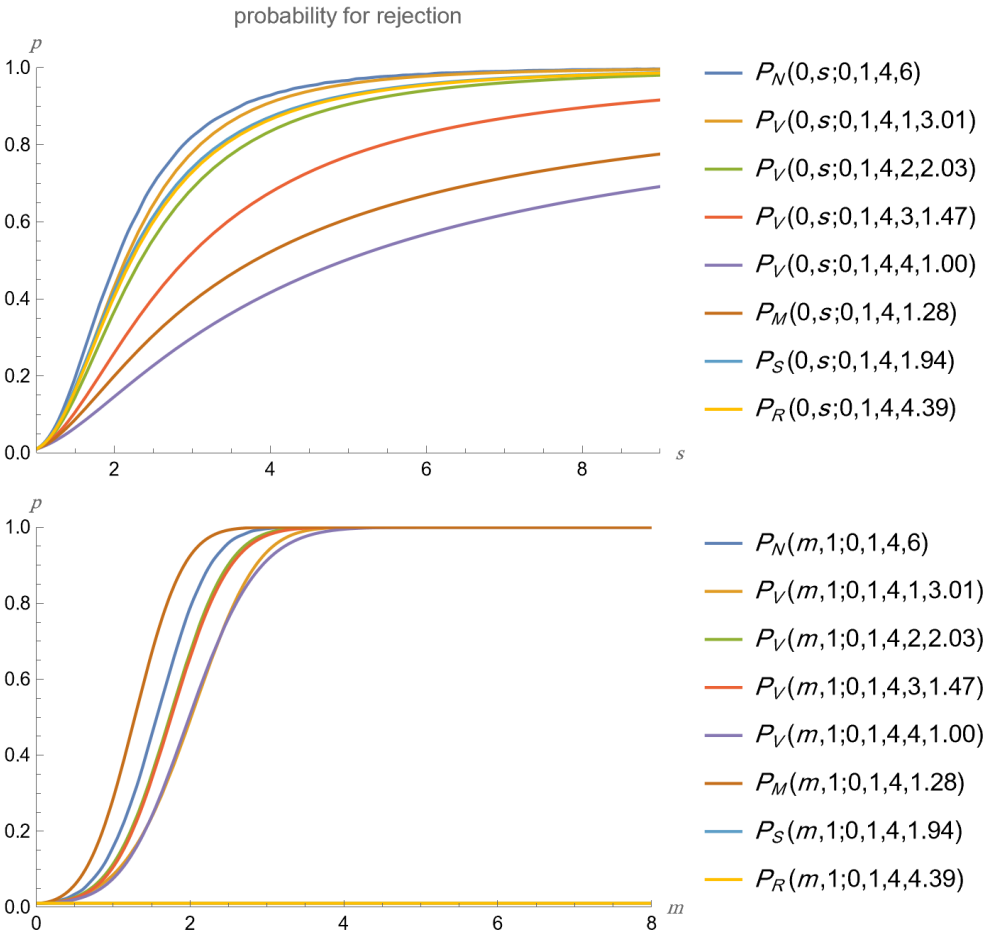

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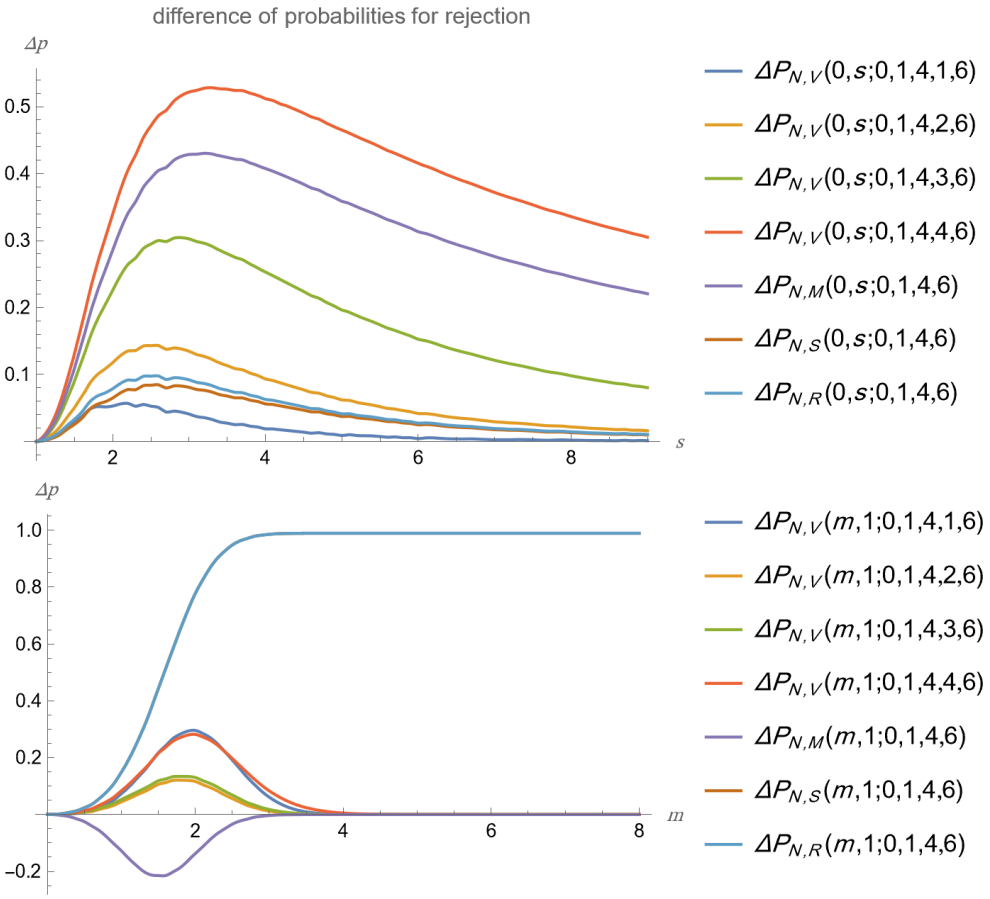

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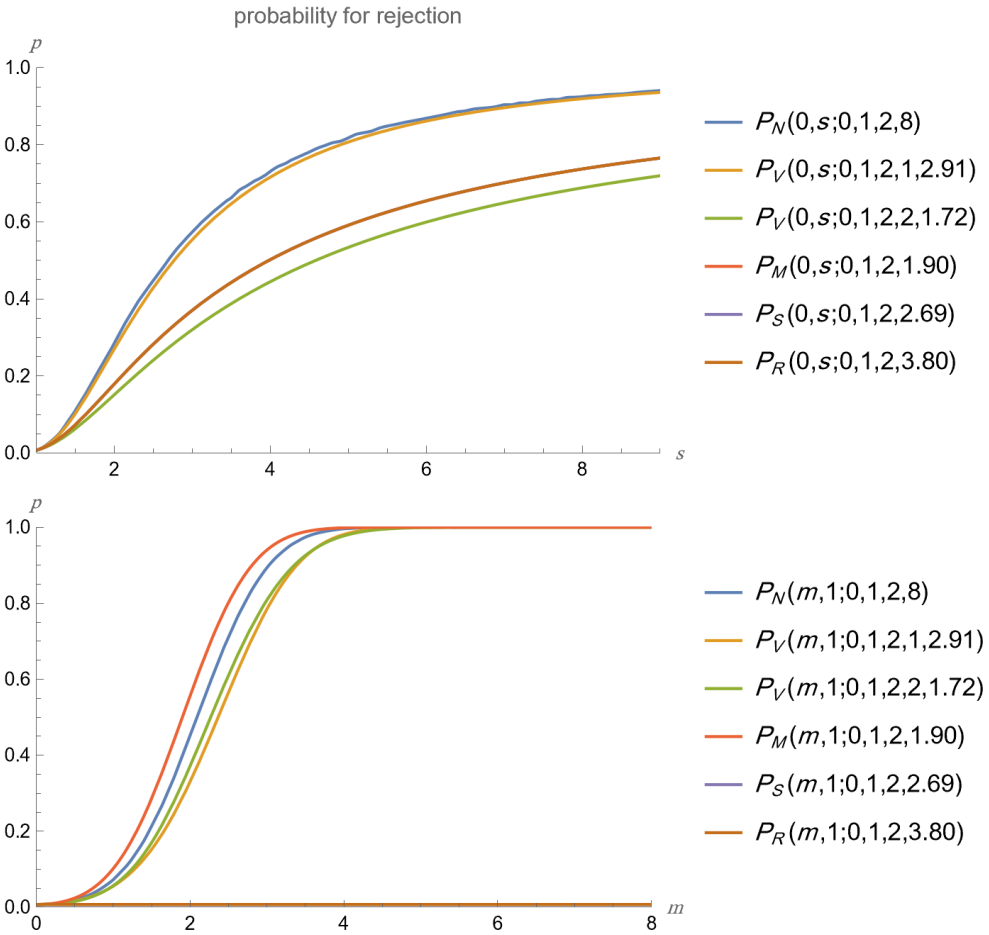
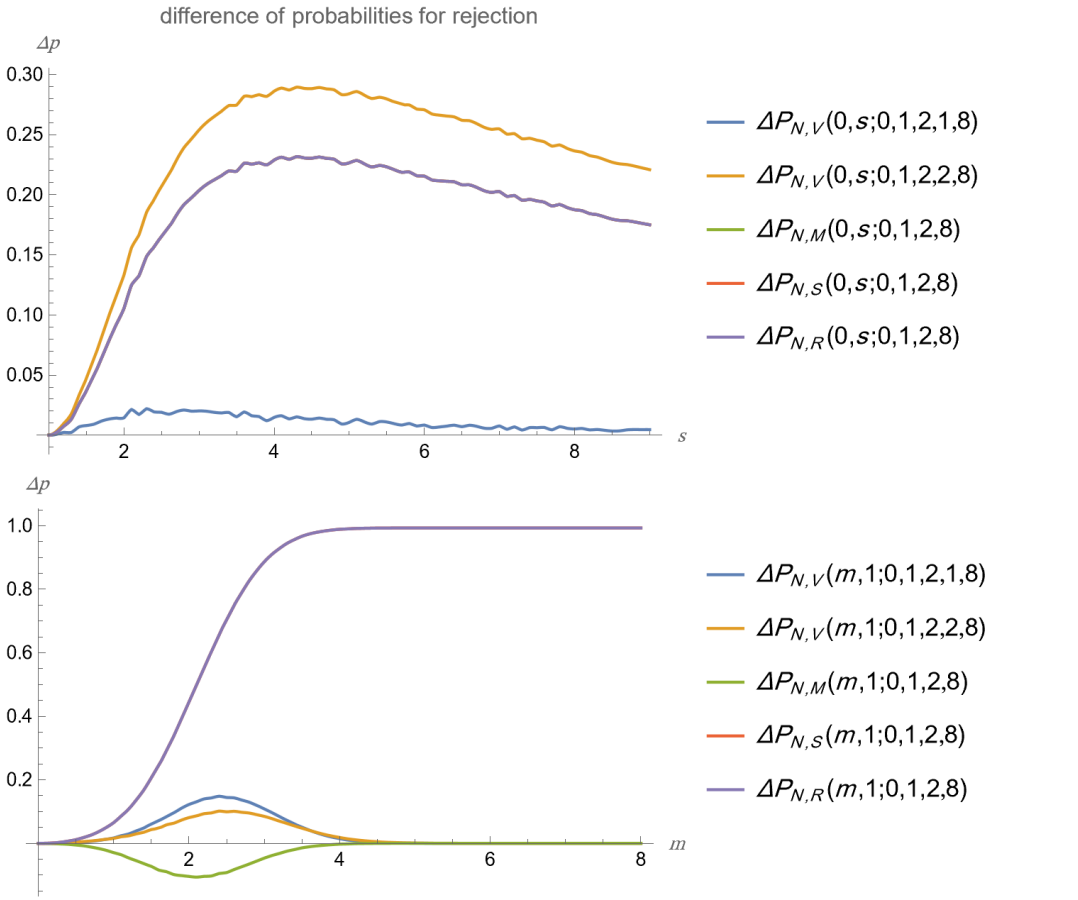


Figure 34: Plots of the probabilities for rejection, for $n = 2$ and $a = 8$



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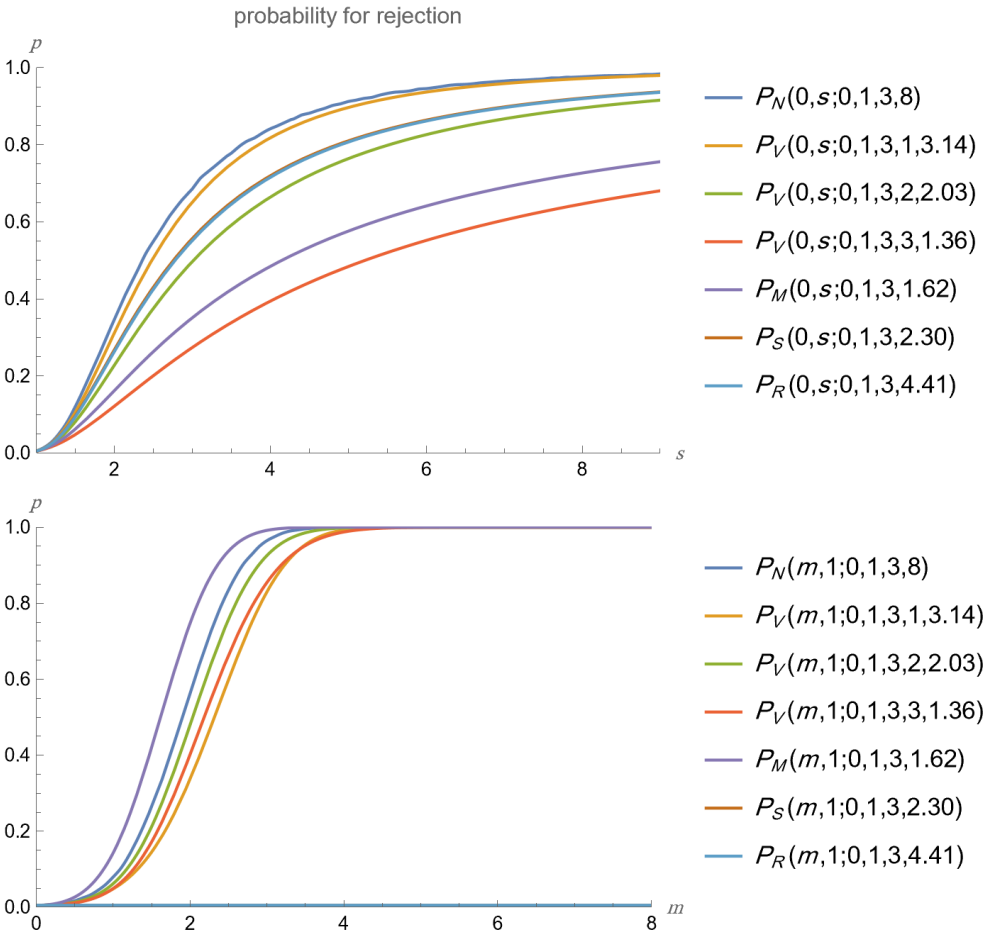
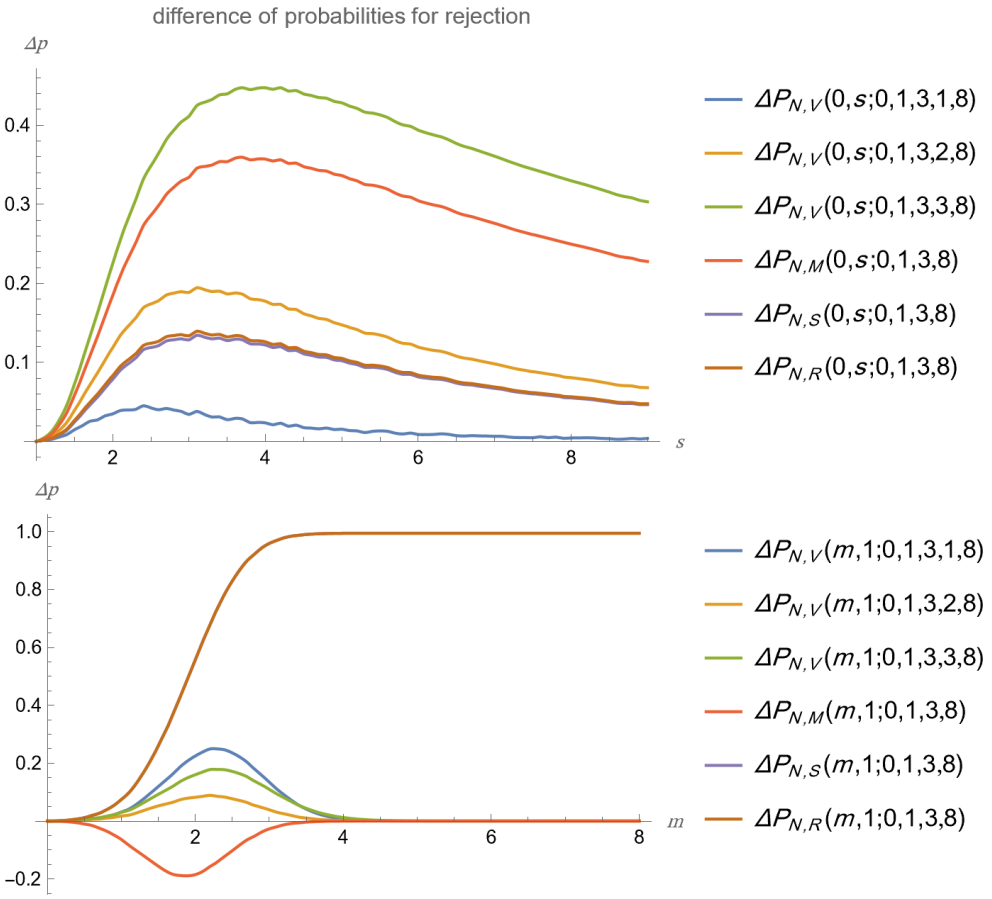


Figure 36: Plots of the probabilities for rejection, for $n = 3$ and $a = 8$



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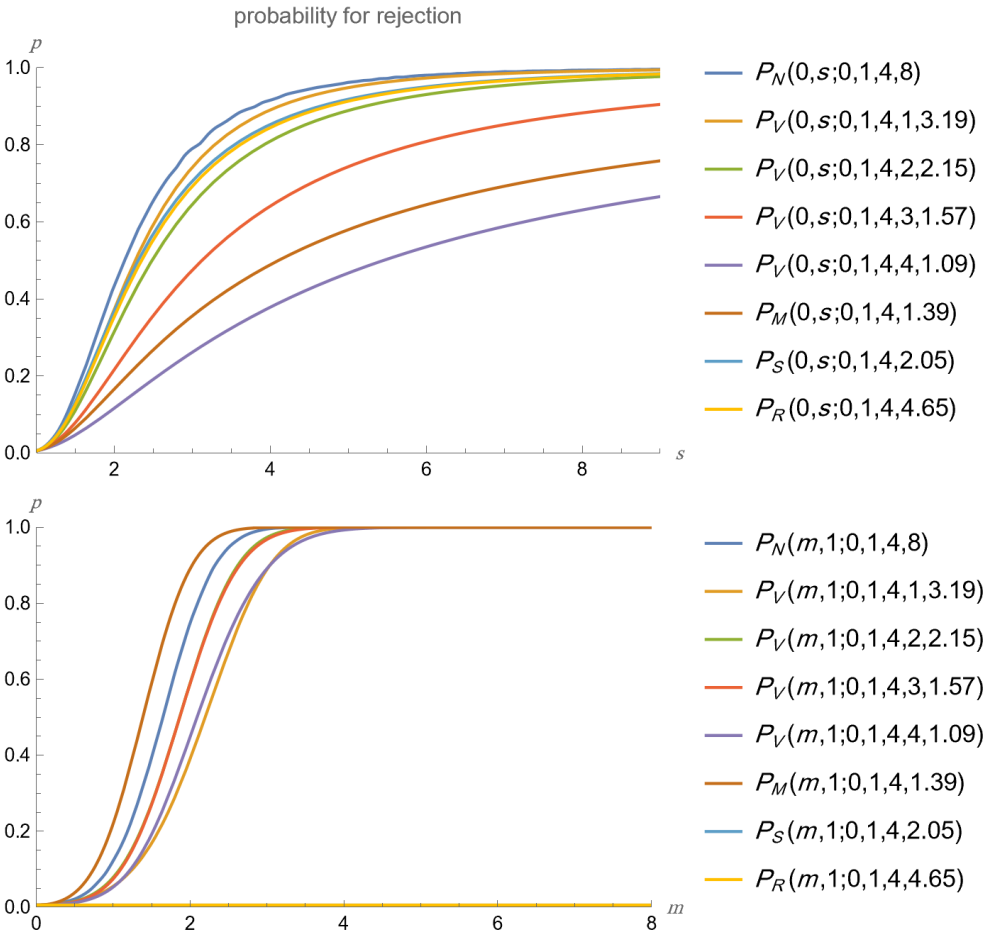

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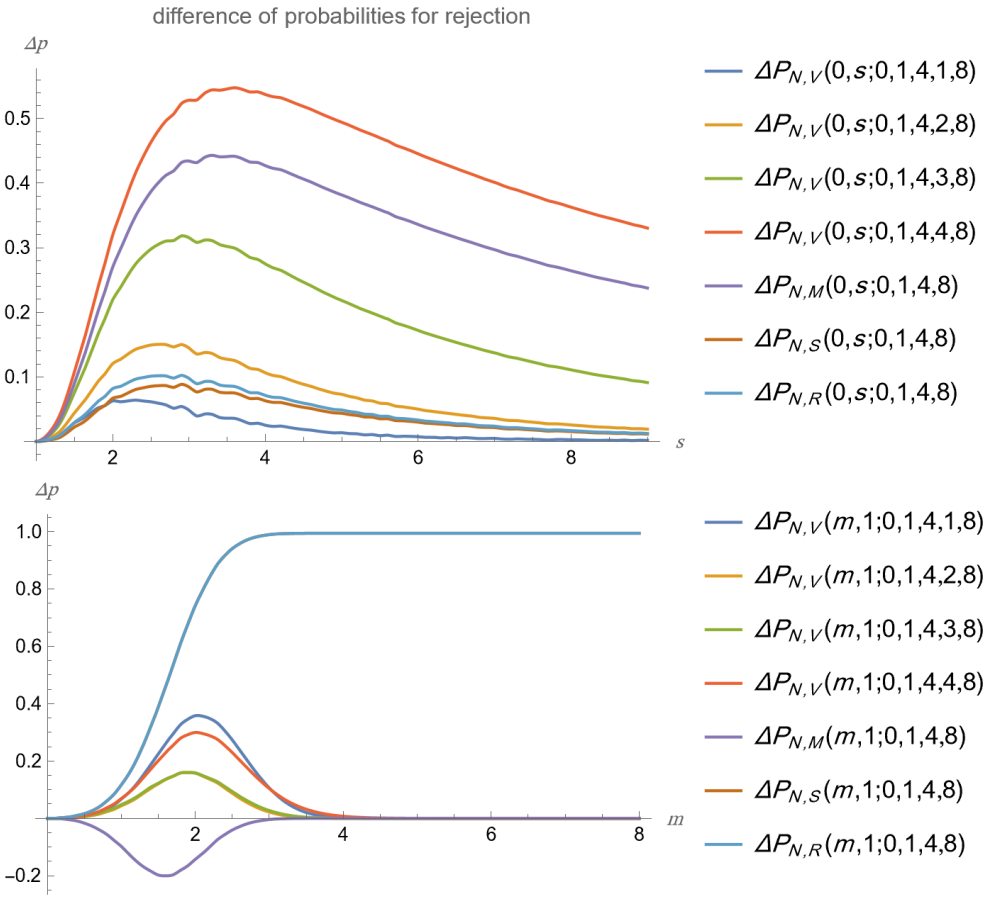

Figure 39: Plots of the differences of the probabilities for rejection, for $n = 4$ *and* $a = 8$

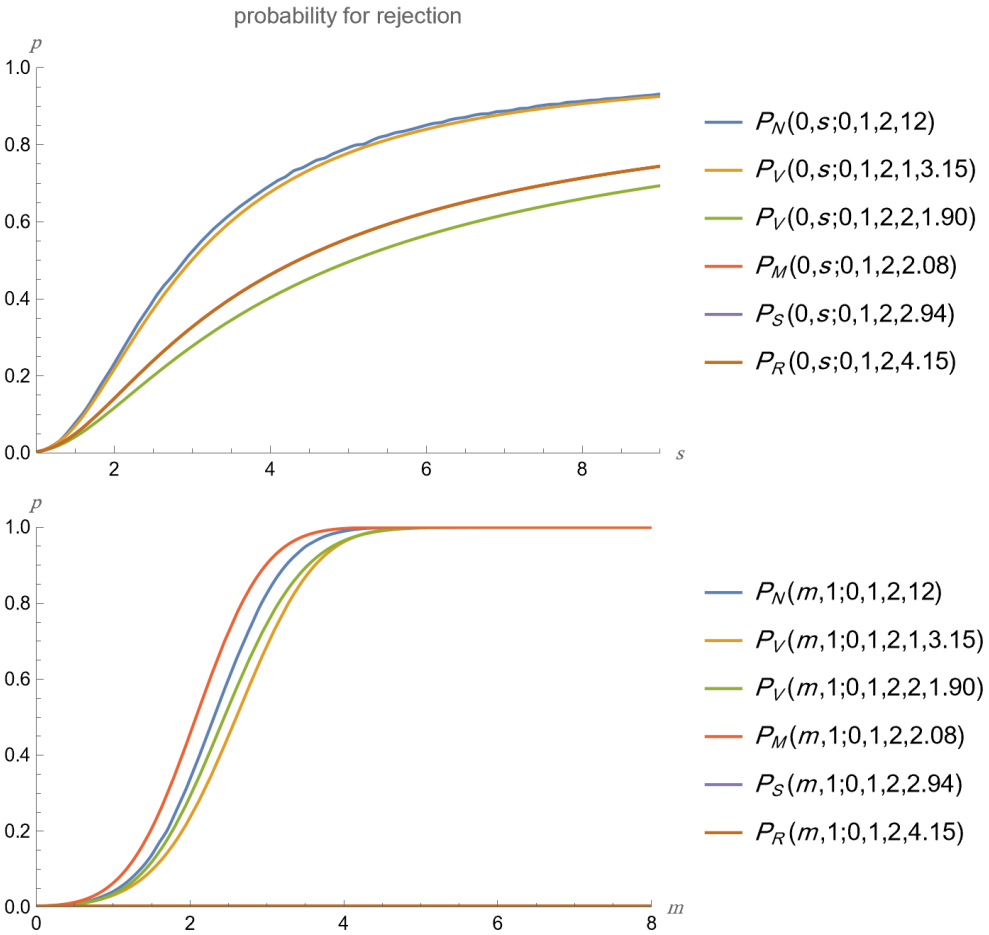

Figure 40: Plots of the probabilities for rejection, for $n = 2$ and $a = 12$

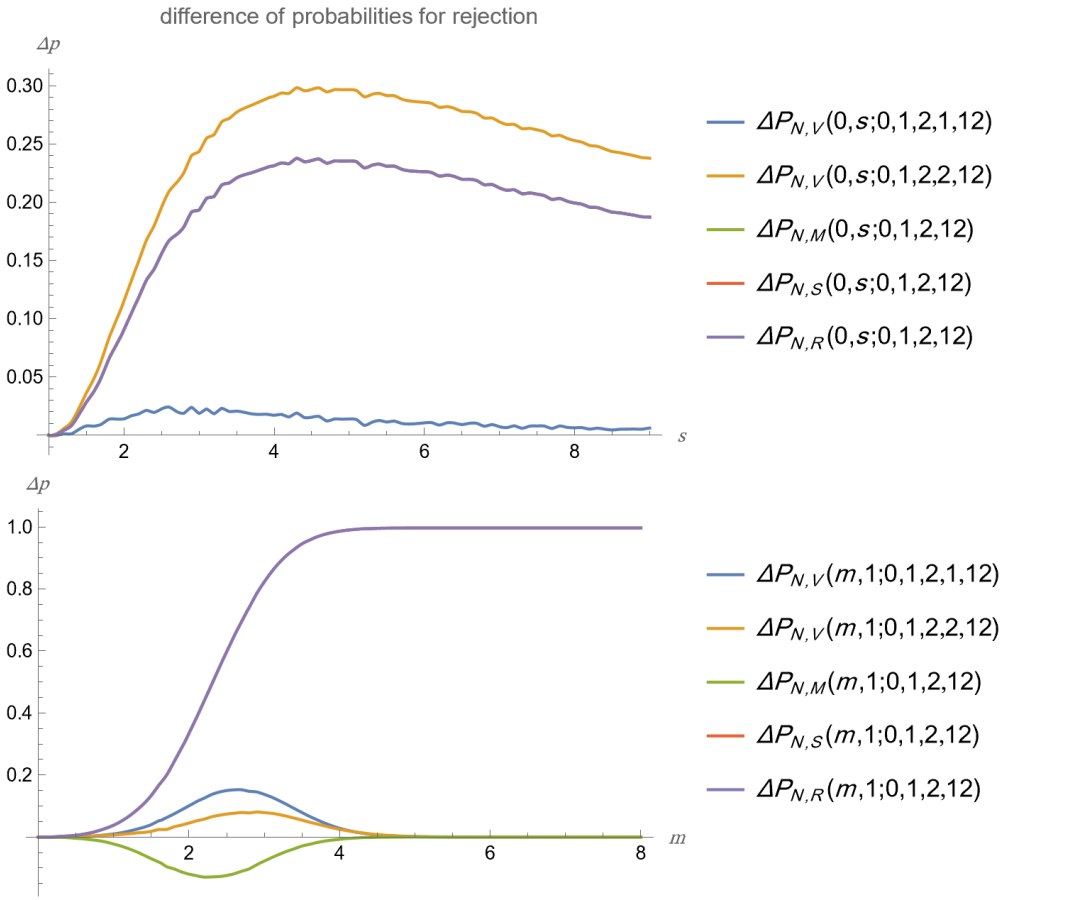

Figure 41:Plots of the differences of the probabilities for rejection, for $n = 2$ *and* $a = 12$

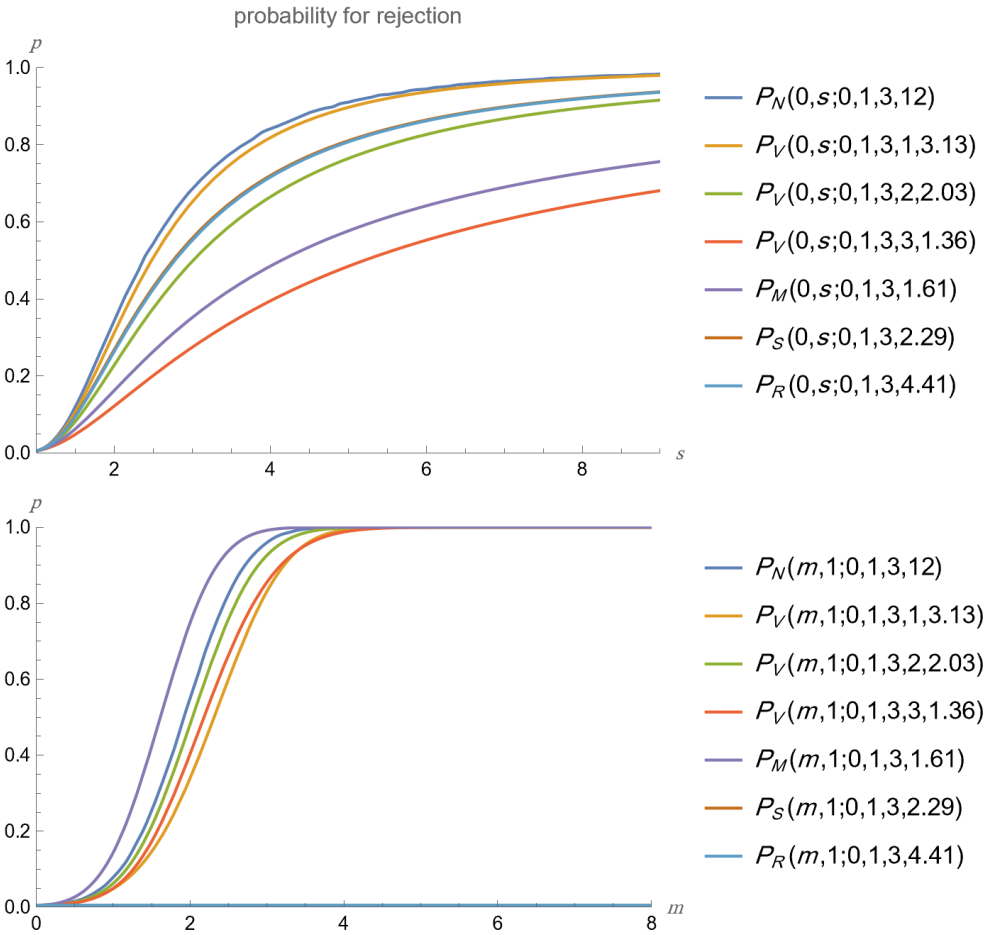

Figure 42: Plots of the probabilities for rejection, for $n = 3$ and $a = 12$

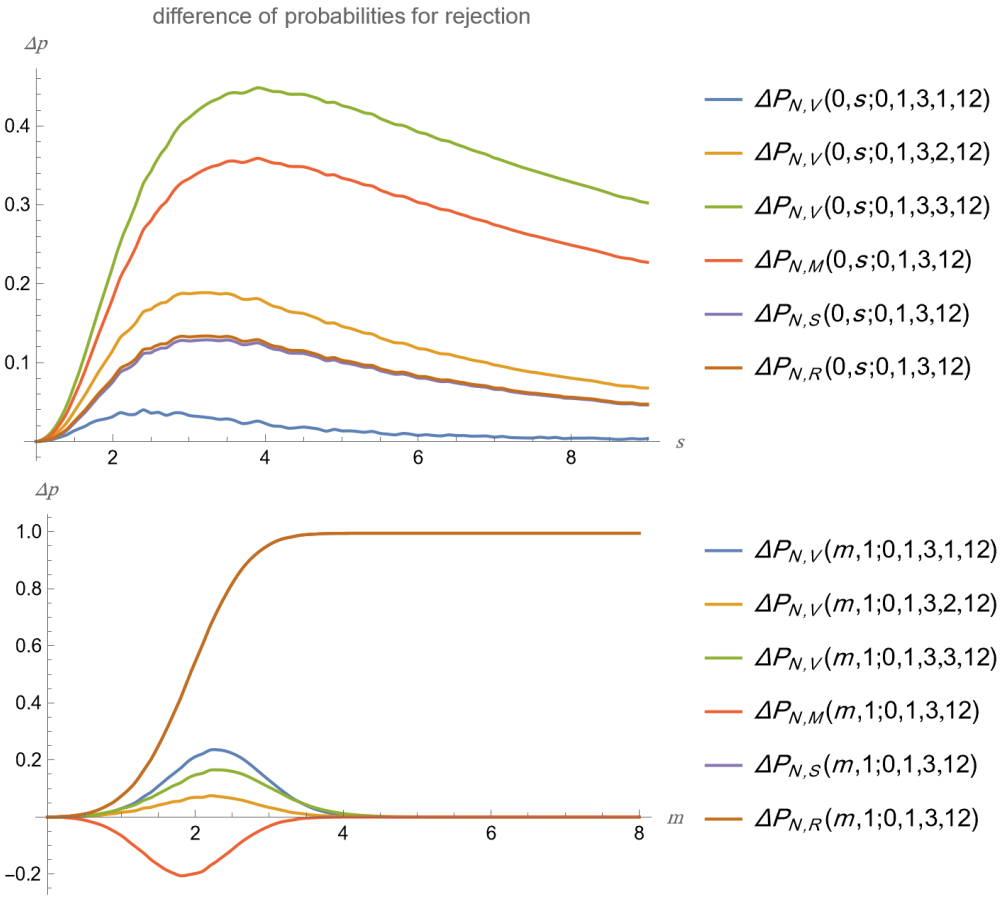

Figure 43: Plots of the differences of the probabilities for rejection, for $n = 3$ *and* $a = 12$

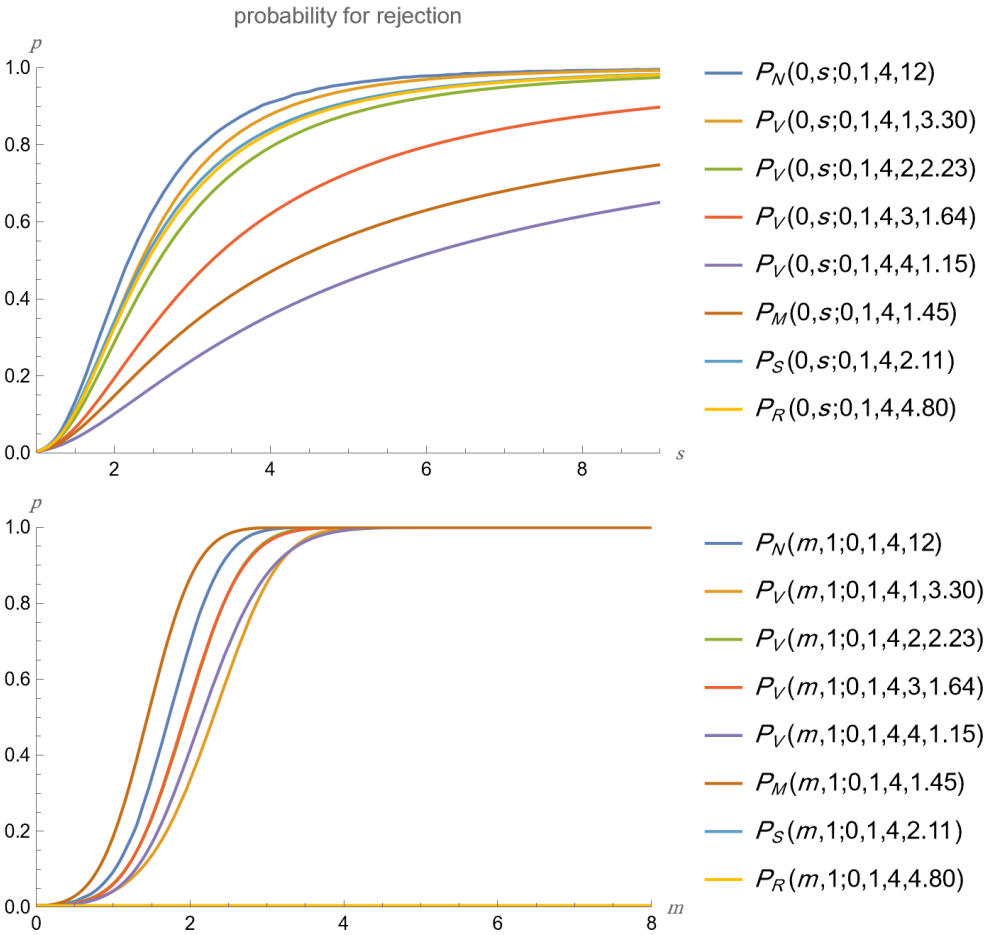

Figure 44: Plots of the probabilities for rejection, for $n = 4$ and $a = 12$

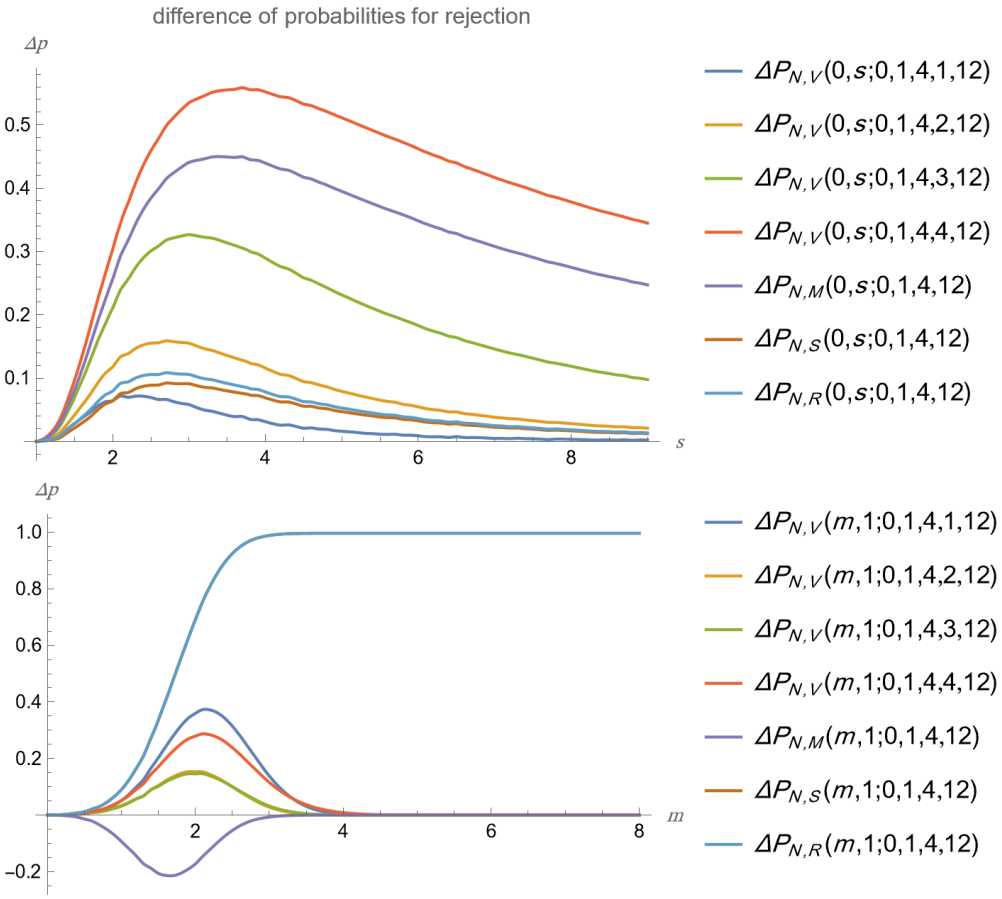

Figure 45: Plots of the differences of the probabilities for rejection, for $n = 4$ *and* $a = 12$

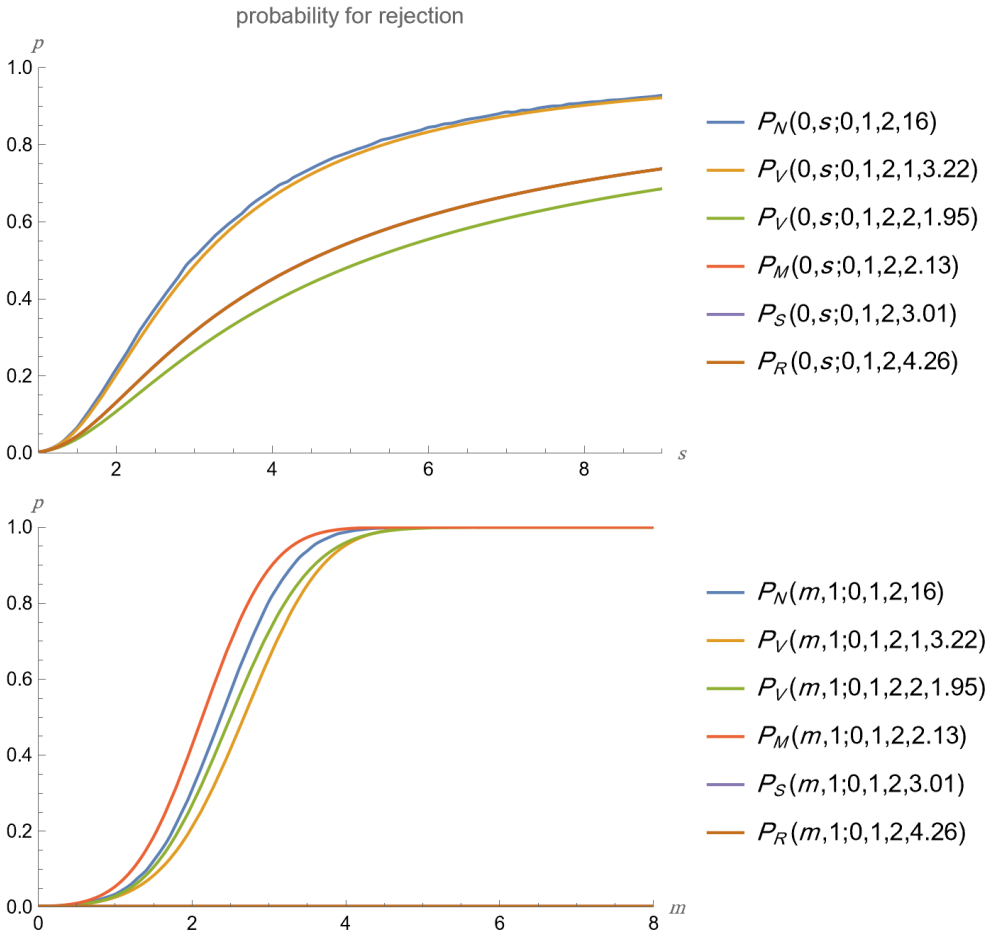

Figure 46: Plots of the probabilities for rejection, for $n = 2$ and $a = 16$

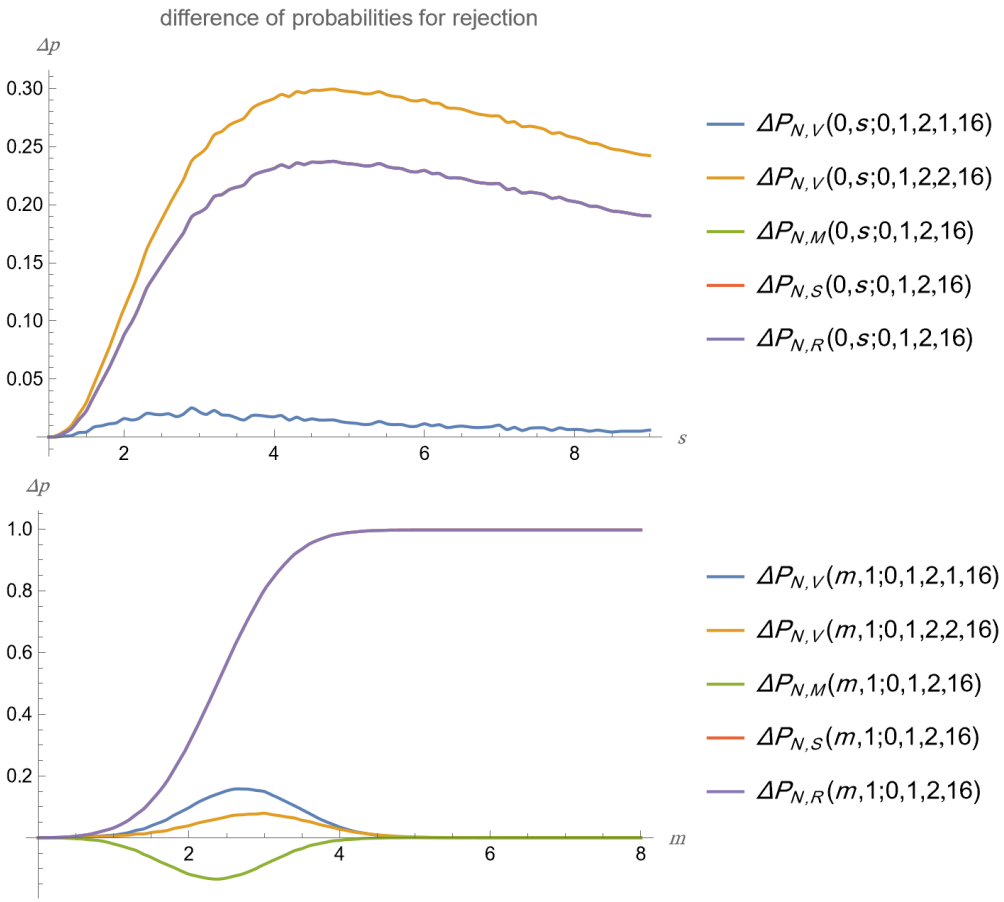

Figure 47: Plots of the differences of the probabilities for rejection, for $n = 2$ *and* $a = 16$

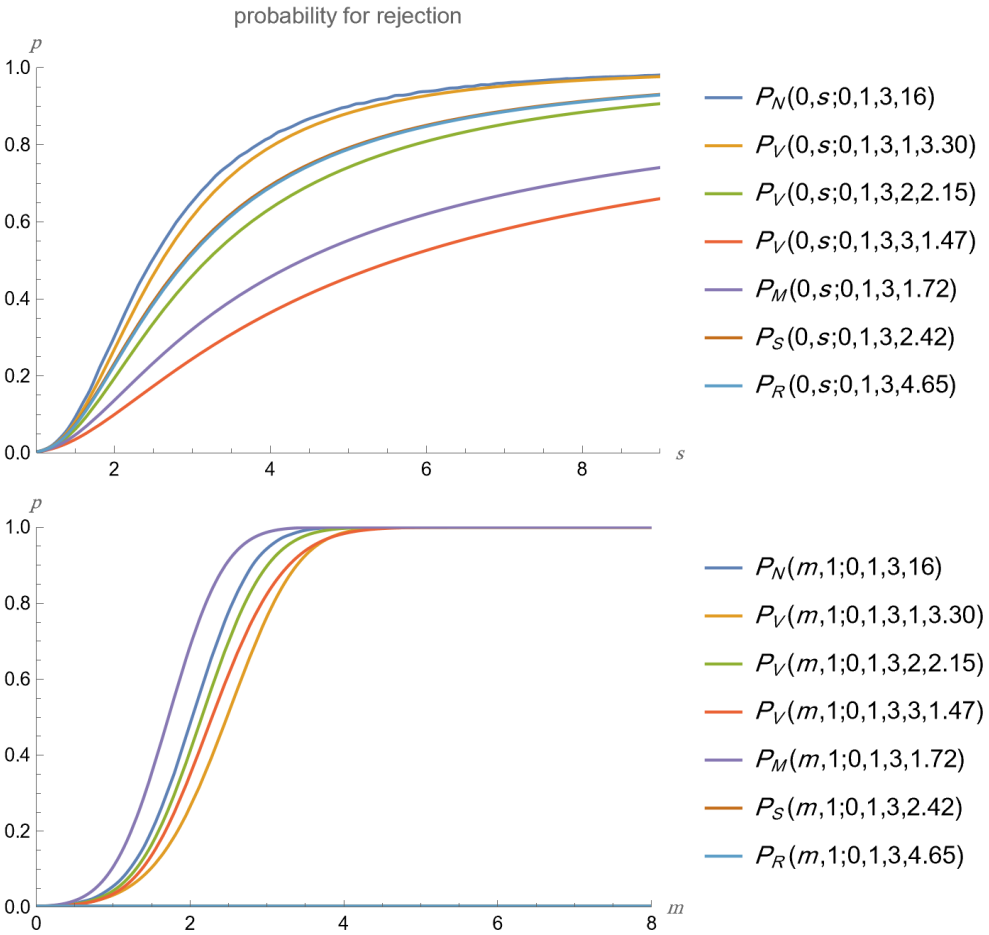

Figure 48: Plots of the probabilities for rejection, for $n = 3$ and $a = 16$

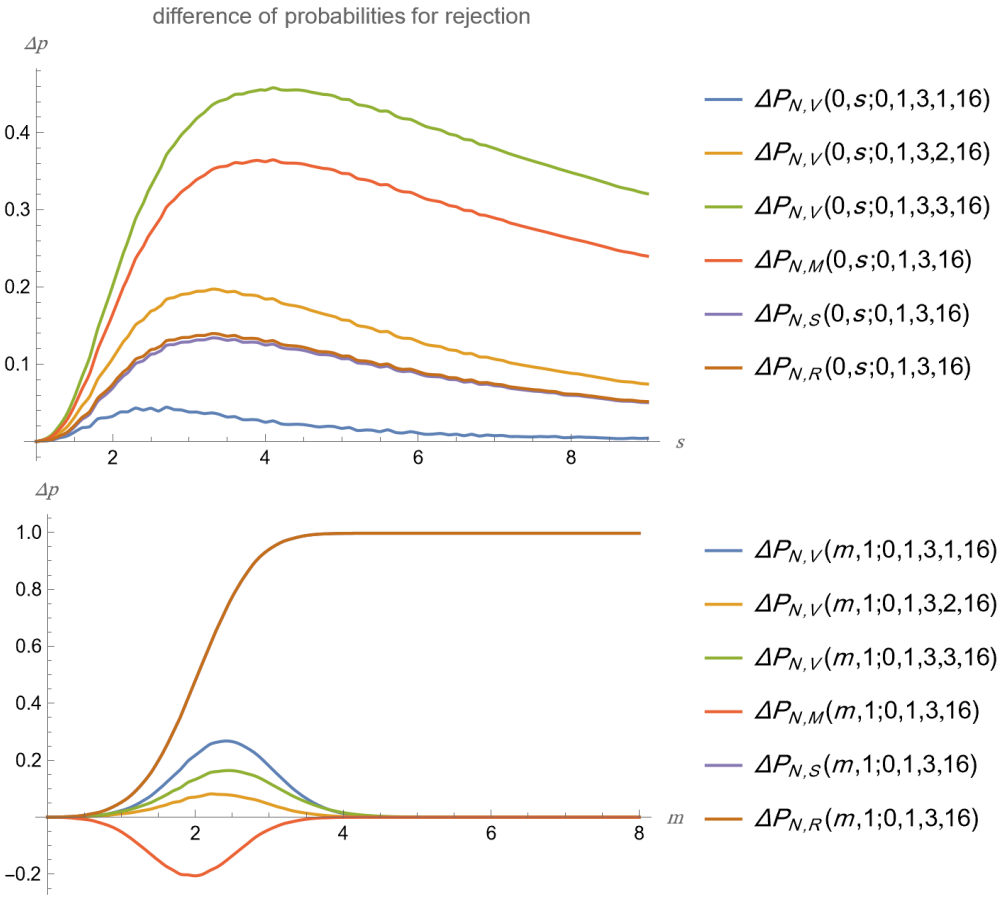

Figure 49: Plots of the differences of the probabilities for rejection, for $n = 3$ *and* $a = 16$

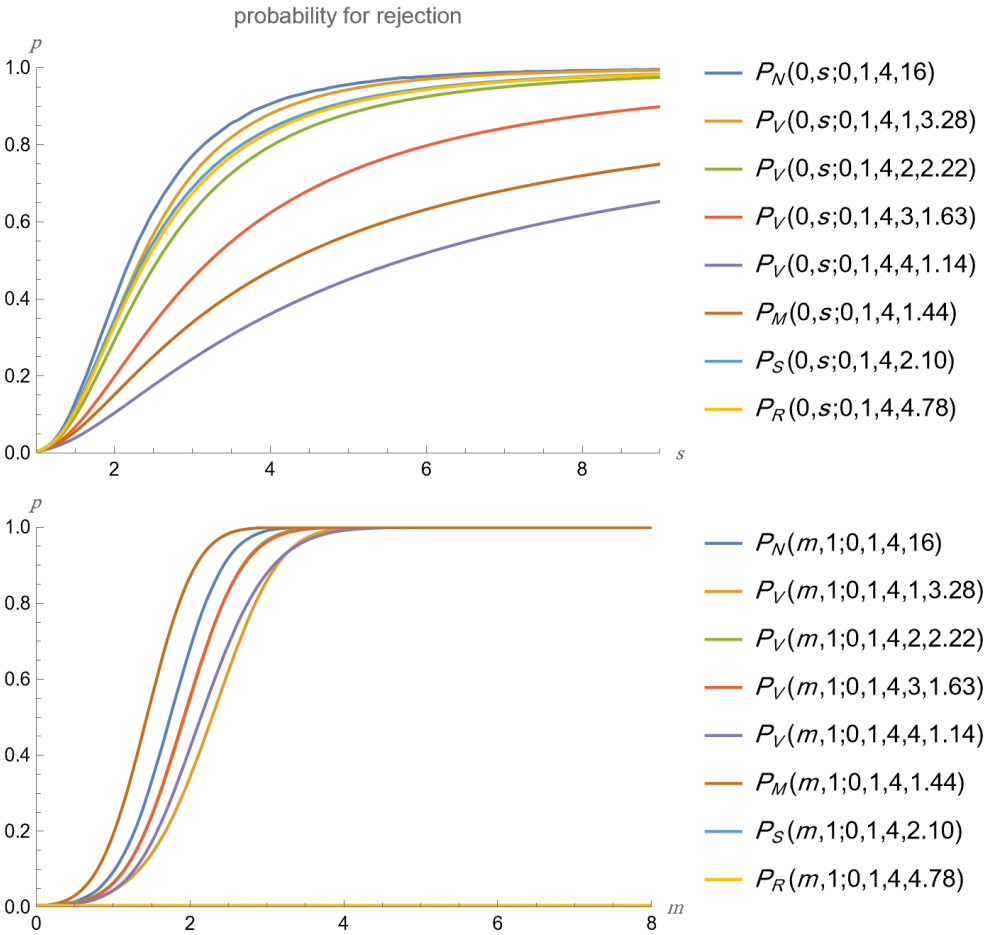

Figure 50: Plots of the probabilities for rejection, for $n = 4$ and $a = 16$

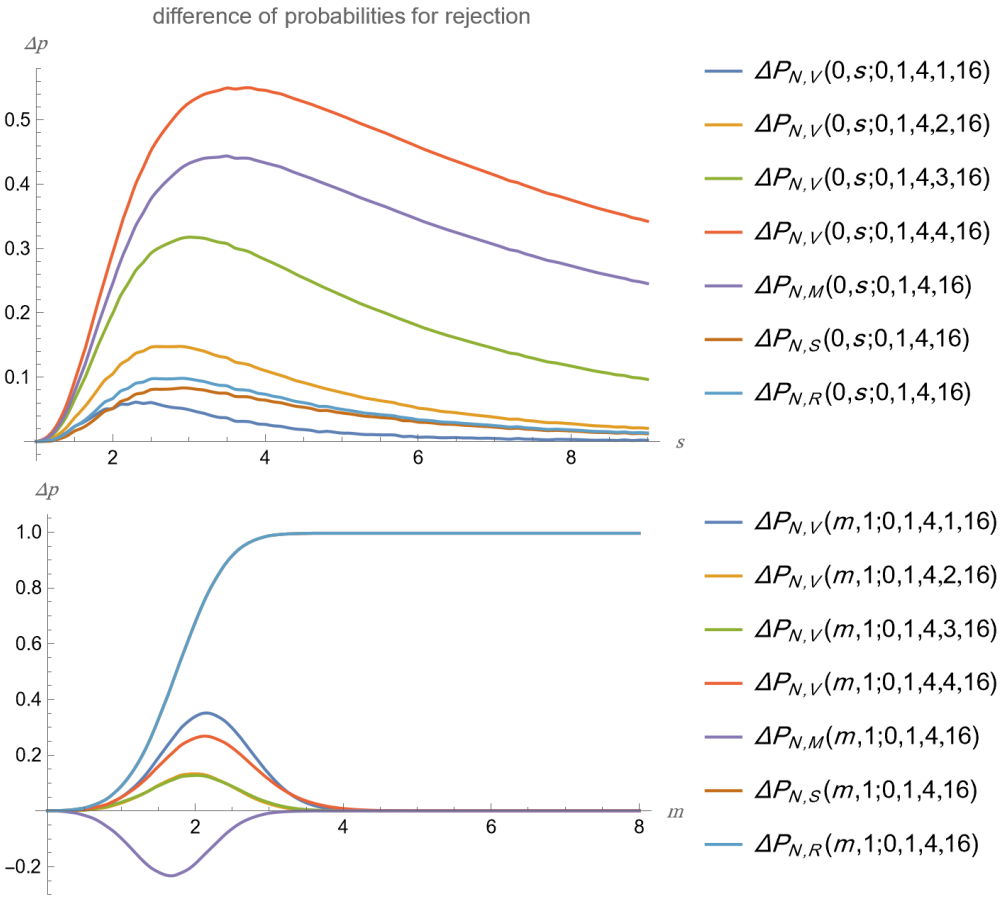

Figure 51:Plots of the differences of the probabilities for rejection, for $n = 4$ *and* $a = 16$

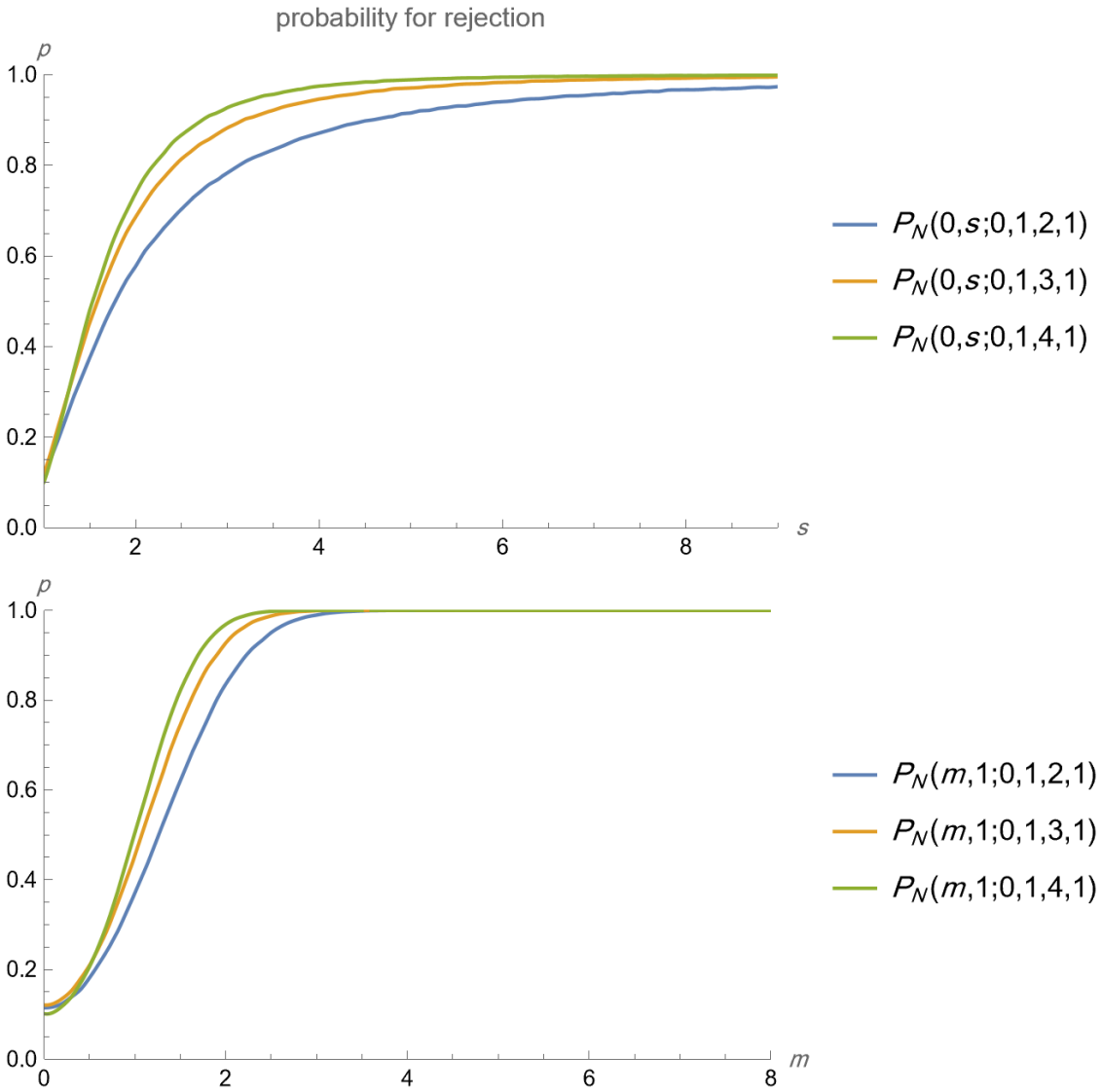

Figure 52: Plots of $P_N(m,s;0,1,n,1)$ *for* $2 \leq n \leq 4$

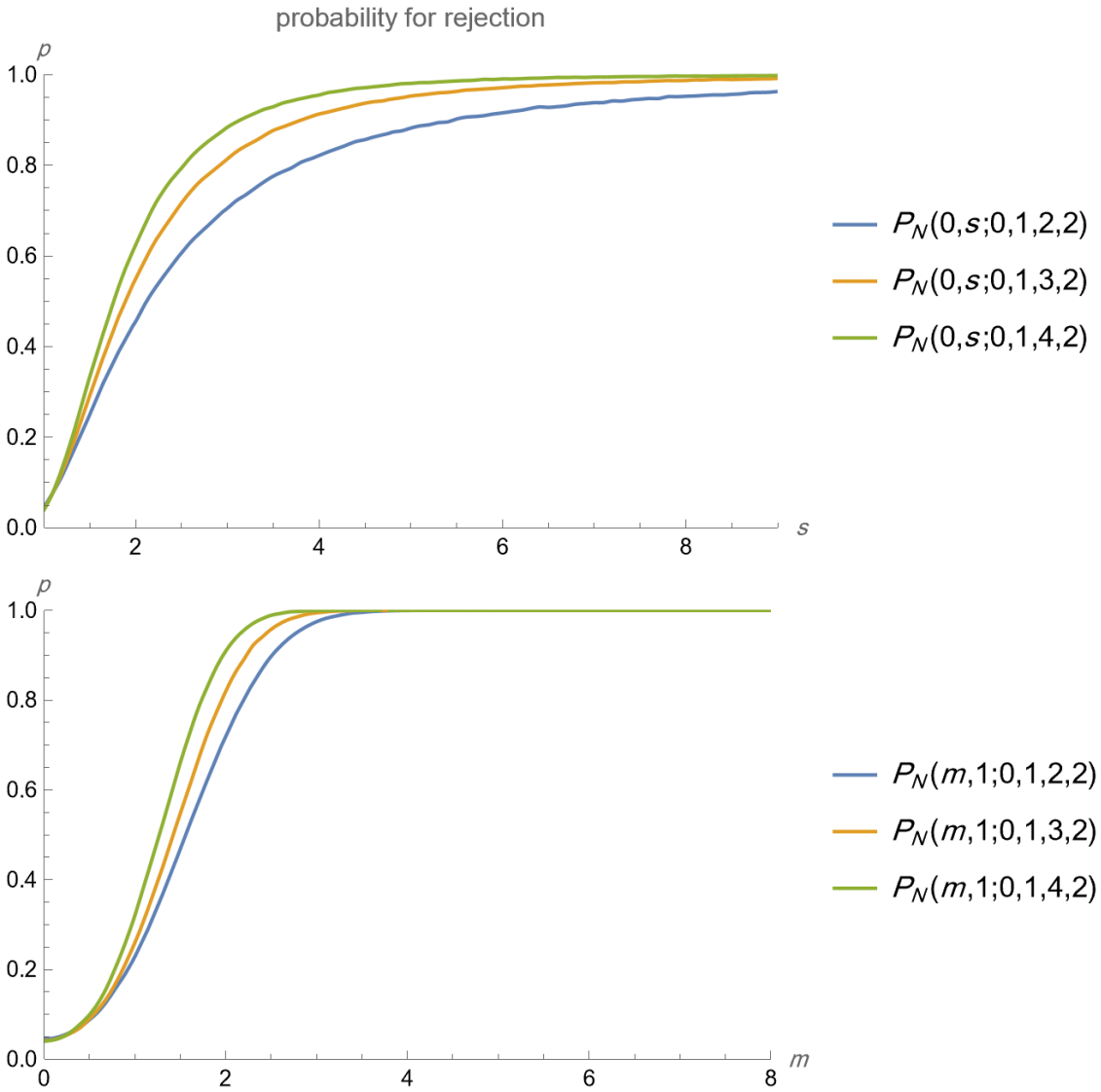

Figure 53: Plots of $P_N(m,s;0,1,n,2)$ *for* $2 \leq n \leq 4$

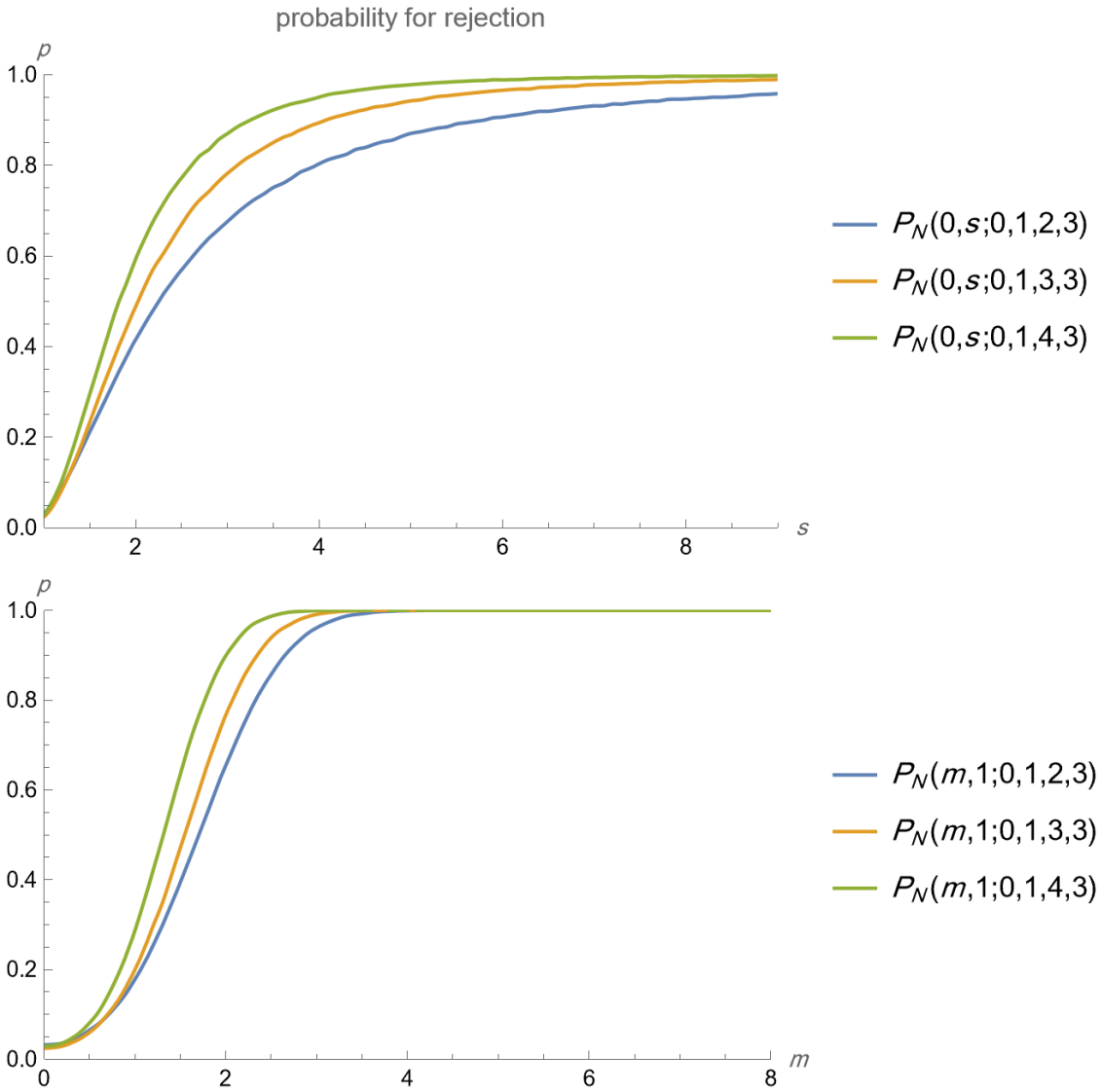

Figure 54: Plots of $P_N(m,s;0,1,n,3)$ *for* $2 \leq n \leq 4$

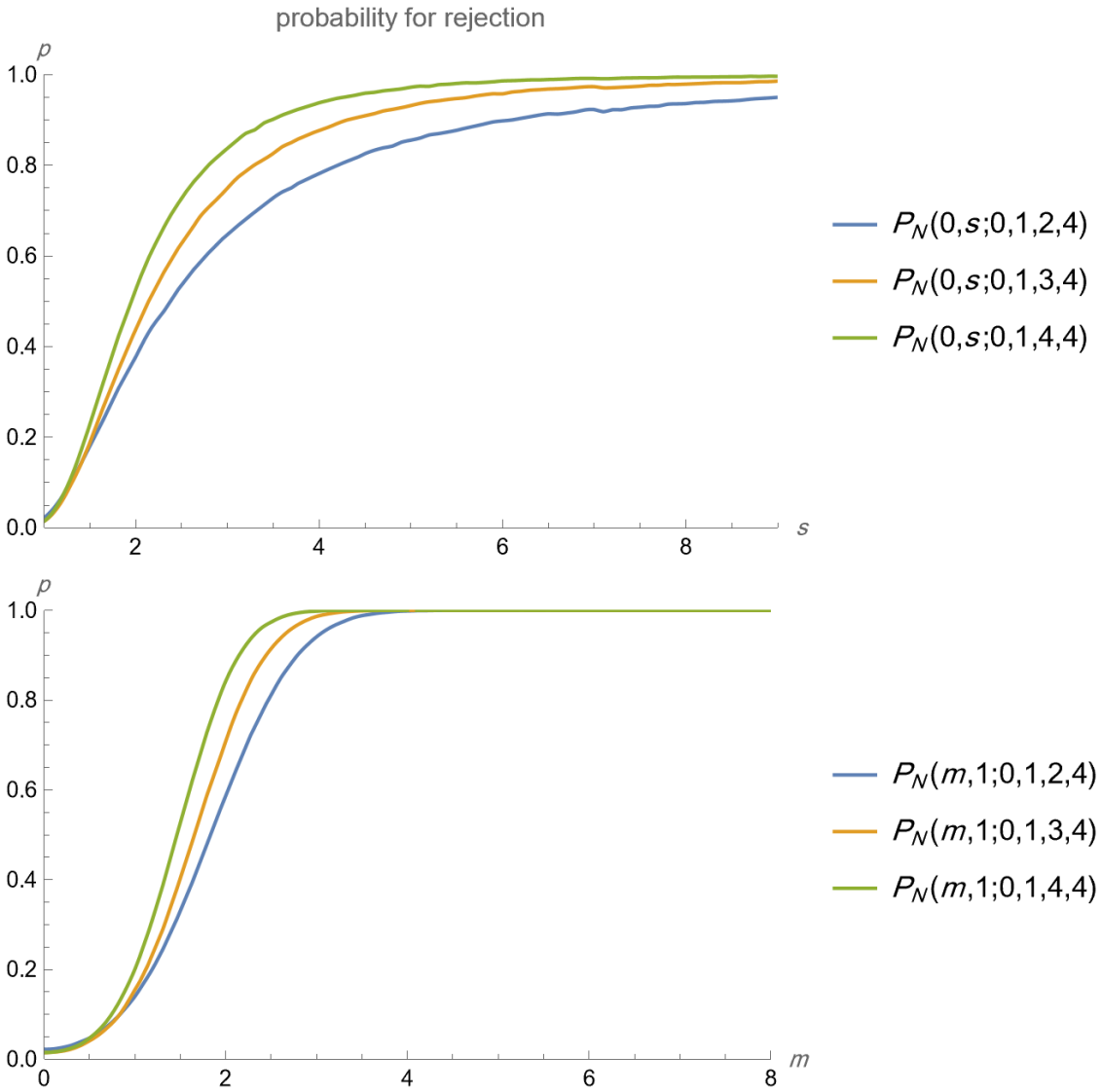

Figure 55: Plots of $P_N(m,s;0,1,n,4)$ *for* $2 \leq n \leq 4$

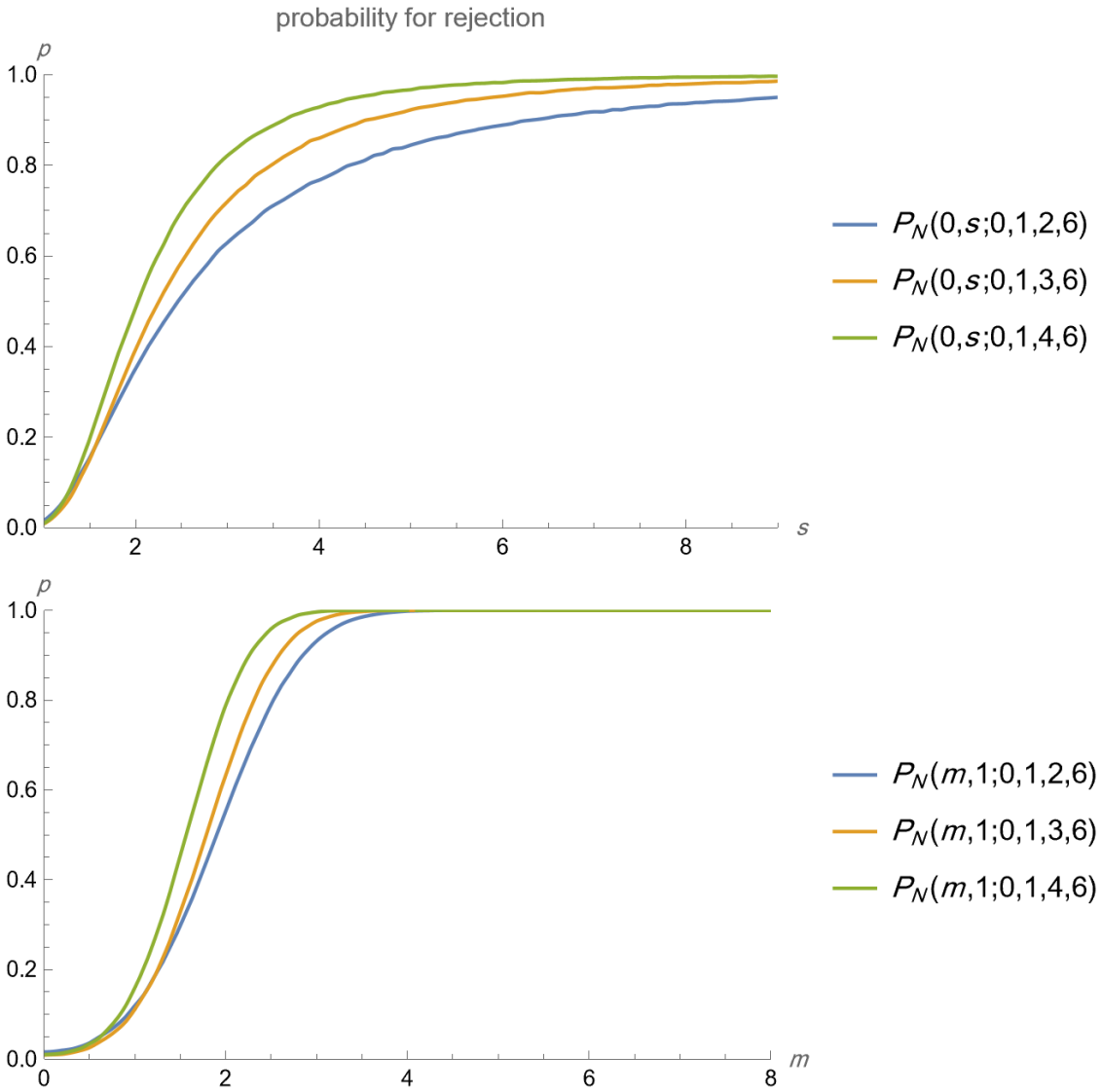

Figure 56: Plots of $P_N(m,s;0,1,n,6)$ *for* $2 \leq n \leq 4$

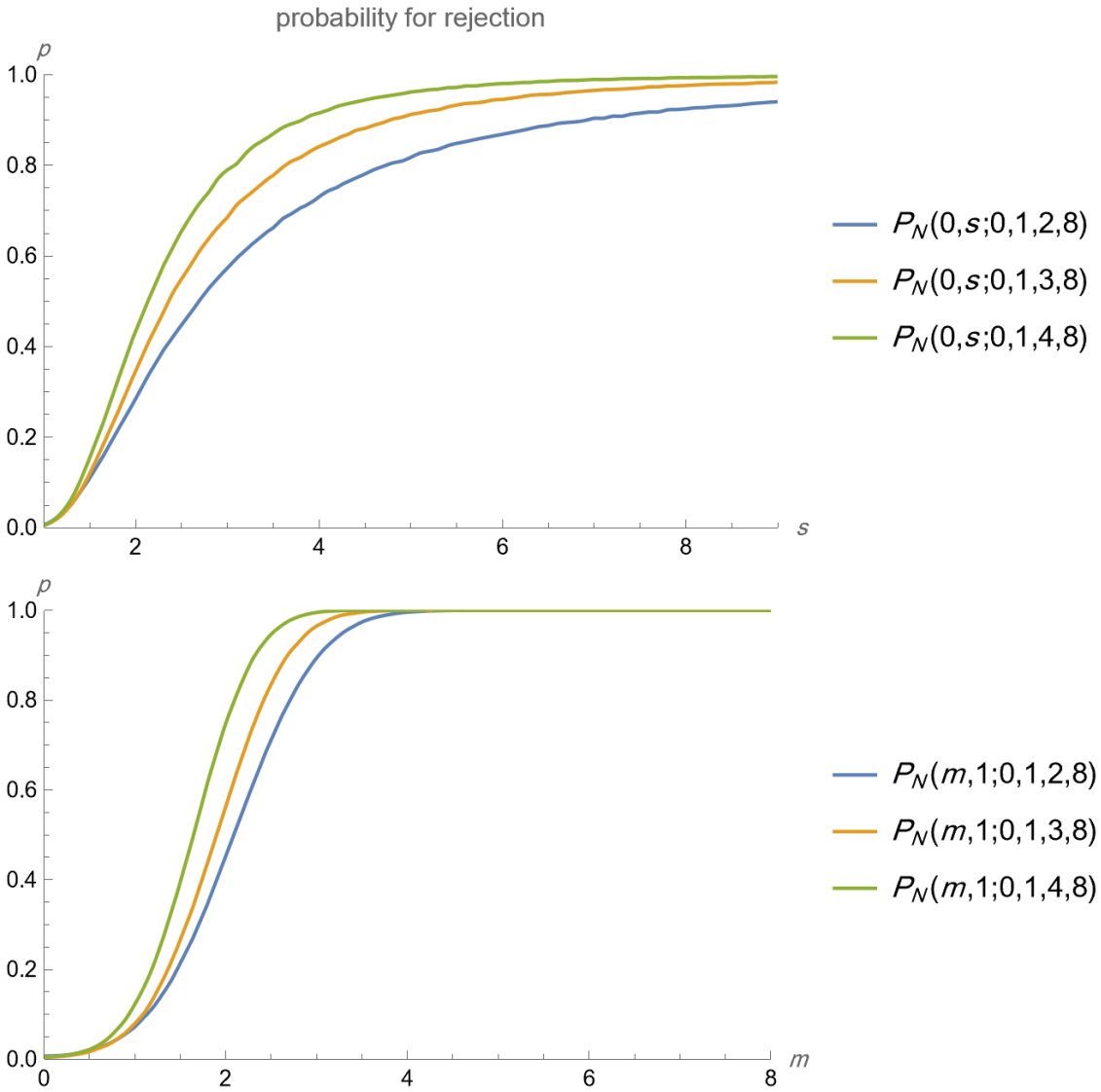

Figure 57: Plots of $P_N(m,s;0,1,n,8)$ *for* $2 \leq n \leq 4$

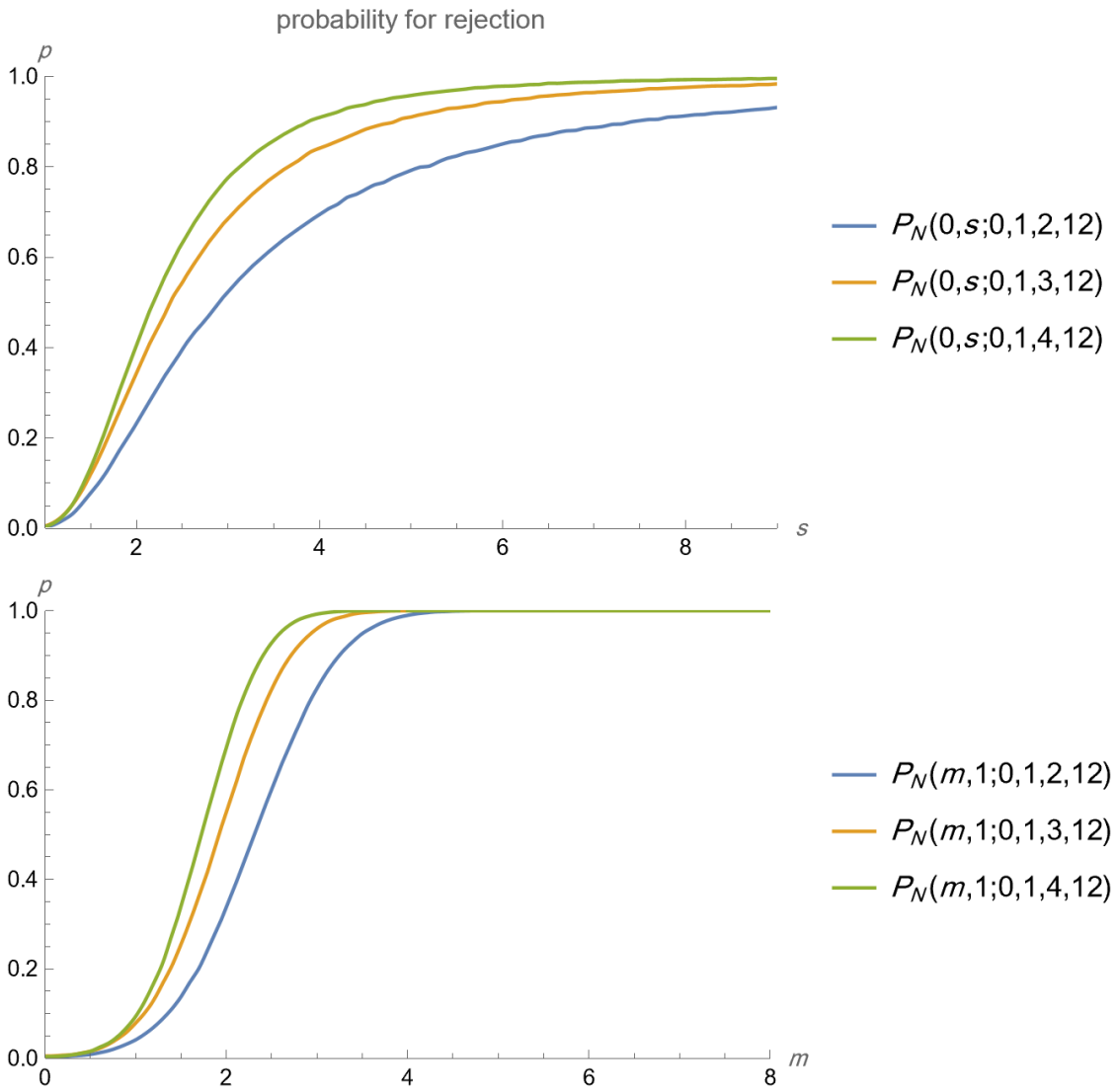

Figure 58: Plots of $P_N(m,s;0,1,n,12)$ *for* $2 \le n \le 4$

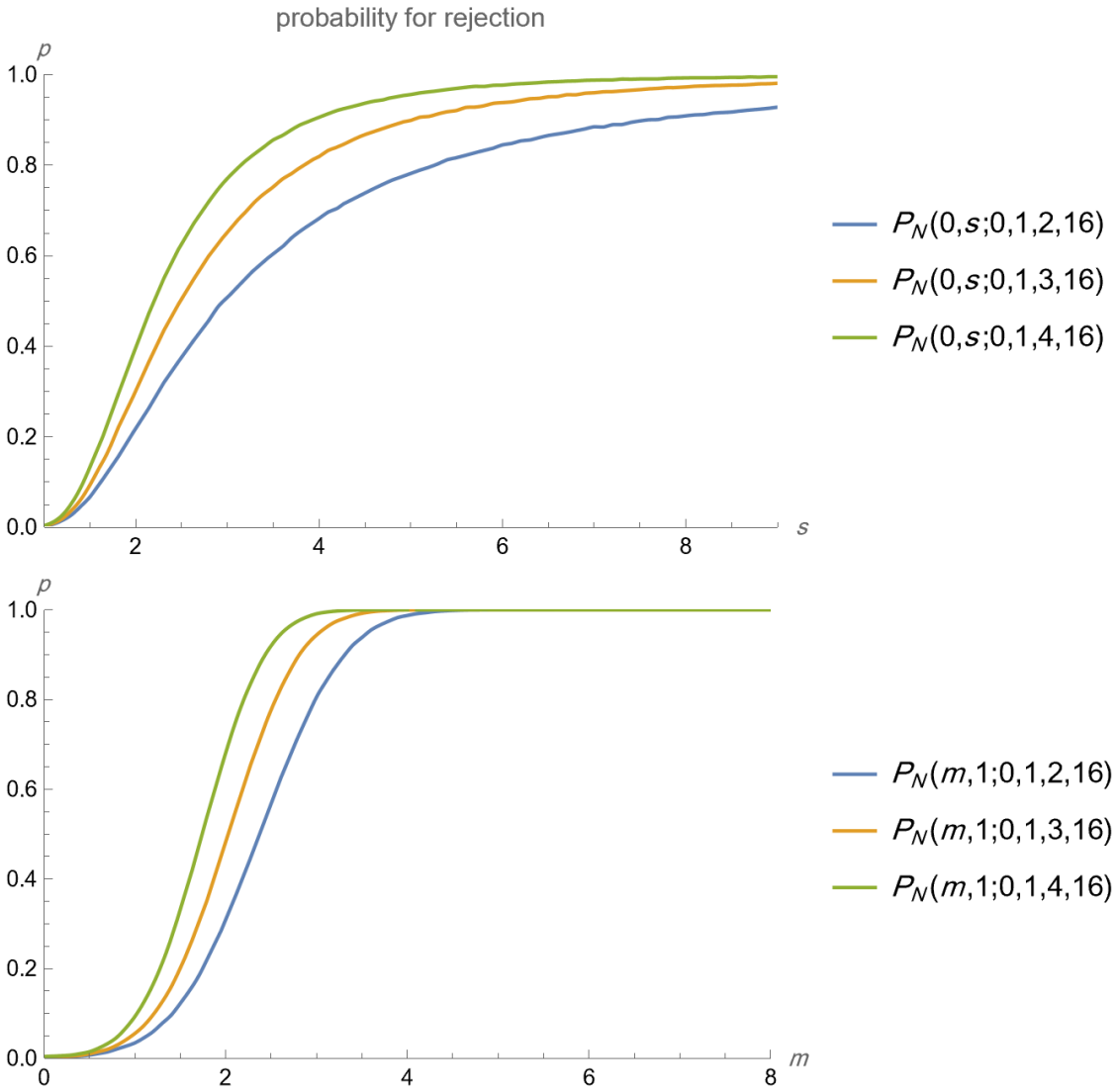

Figure 59: Plots of $P_N(m,s;0,1,n,16)$ *for* $2 \le n \le 4$