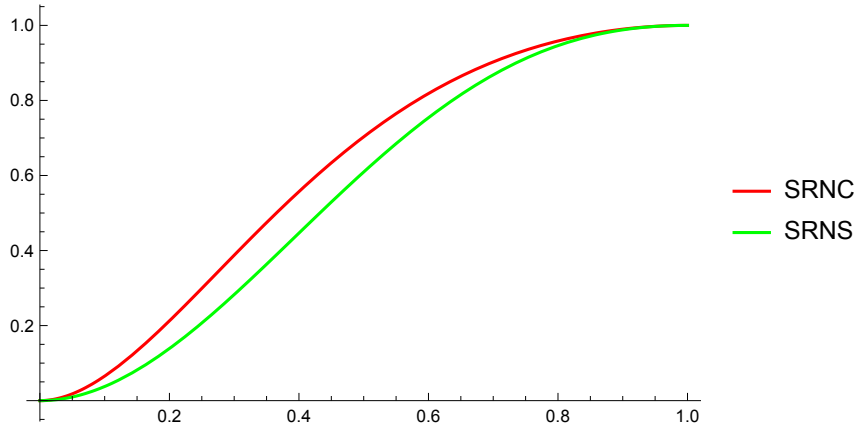
Cap. 1

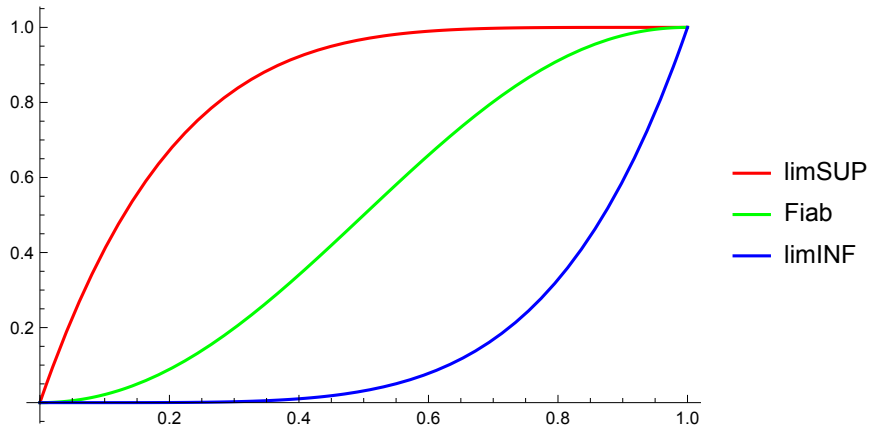
Exercício 1.58

```
Plot[{p^2 (2 - p)^2 (2 - 2 p + p^2), p^2 (2 - p) (2 - 2 p^2 + p^3)},
 {p, 0, 1}, PlotLegends → Placed[{"SRNC", "SRNS"}, Right],
 PlotStyle → {RGBColor[1, 0, 0], RGBColor[0, 1, 0]}]
```



Exercício 1.67

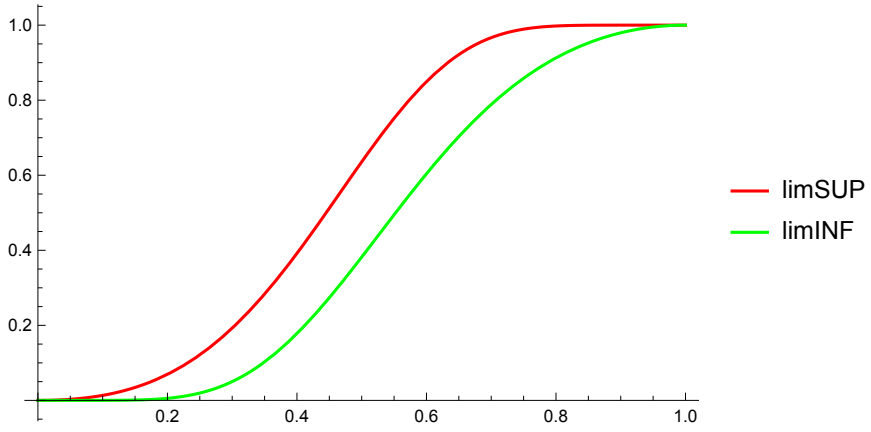
```
Plot[{1 - (1 - p)^5, 2 p^2 + 2 p^3 - 5 p^4 + 2 p^5, p^5}, {p, 0, 1},
 PlotLegends → Placed[{"limSUP", "Fiab", "limINF"}, Right],
 PlotStyle → {RGBColor[1, 0, 0], RGBColor[0, 1, 0], RGBColor[0, 0, 1]}]
MatrixForm[Table[{p, p^5, 2 p^2 + 2 p^3 - 5 p^4 + 2 p^5, 1 - (1 - p)^5}, {p, 0.9, .99, 0.01}]]
```



$$\begin{pmatrix} 0.9 & 0.59049 & 0.97848 & 0.99999 \\ 0.91 & 0.624032 & 0.982658 & 0.999994 \\ 0.92 & 0.659082 & 0.986374 & 0.999997 \\ 0.93 & 0.695688 & 0.989631 & 0.999998 \\ 0.94 & 0.733904 & 0.992431 & 0.999999 \\ 0.95 & 0.773781 & 0.994781 & 1. \\ 0.96 & 0.815373 & 0.996685 & 1. \\ 0.97 & 0.858734 & 0.99815 & 1. \\ 0.98 & 0.903921 & 0.999185 & 1. \\ 0.99 & 0.95099 & 0.999798 & 1. \end{pmatrix}$$

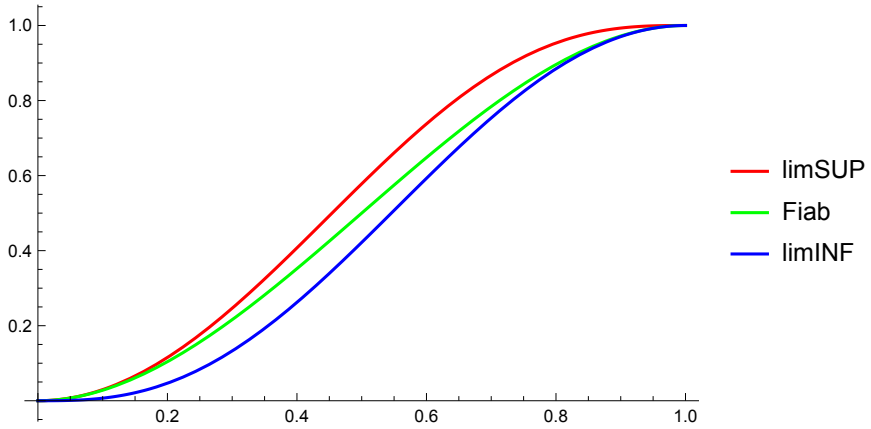
Exercício 1.69

```
Plot[{1 - (1 - p^2) × (1 - p^3)^3 × (1 - p^4)^4 × (1 - p^5)^2, (1 - (1 - p)^2)^2 × (1 - (1 - p)^4)^6},
 {p, 0, 1}, PlotLegends → Placed[{"limSUP", "limINF"}, Right],
 PlotStyle → {RGBColor[1, 0, 0], RGBColor[0, 1, 0]}]
```

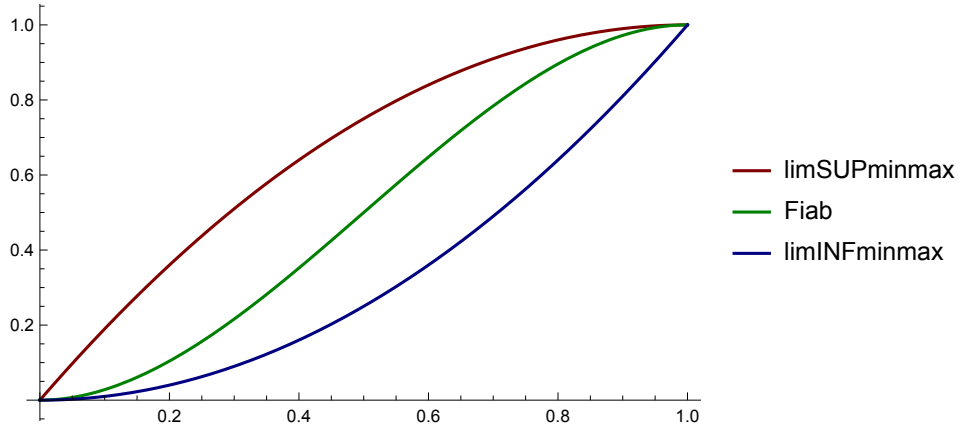


Exercício 1.72

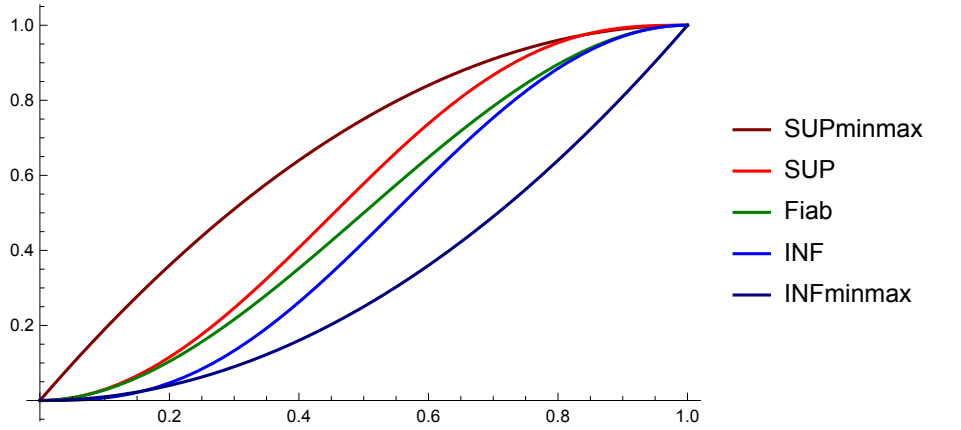
```
Plot[{1 - (1 - p^2)^3, p^2 (3 - 2 p), (1 - (1 - p)^2)^3}, {p, 0, 1},
 PlotLegends → Placed[{"limSUP", "Fiab", "limINF"}, Right],
 PlotStyle → {RGBColor[1, 0, 0], RGBColor[0, 1, 0], RGBColor[0, 0, 1]}]
```



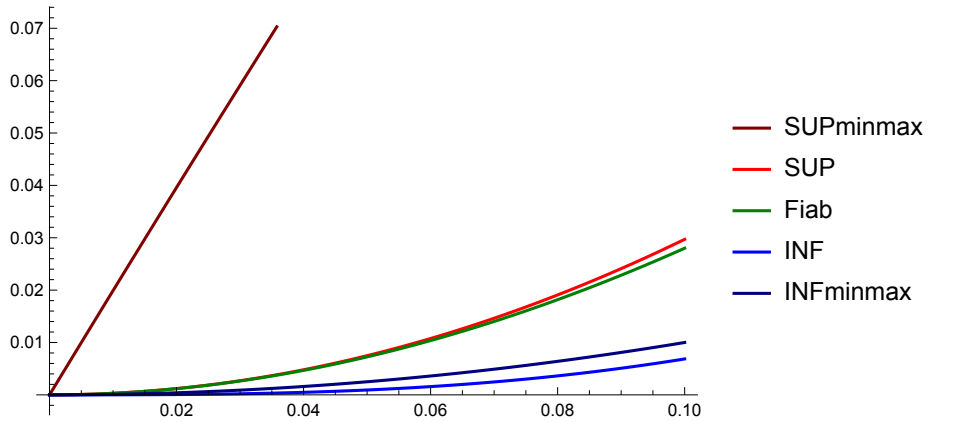
```
Plot[{1 - (1 - p)^2, p^2 (3 - 2 p), p^2}, {p, 0, 1},
 PlotLegends → Placed[{"limSUPminmax", "Fiab", "limINFminmax"}, Right],
 PlotStyle → {RGBColor[.5, 0, 0], RGBColor[0, .5, 0], RGBColor[0, 0, .5]}]
```



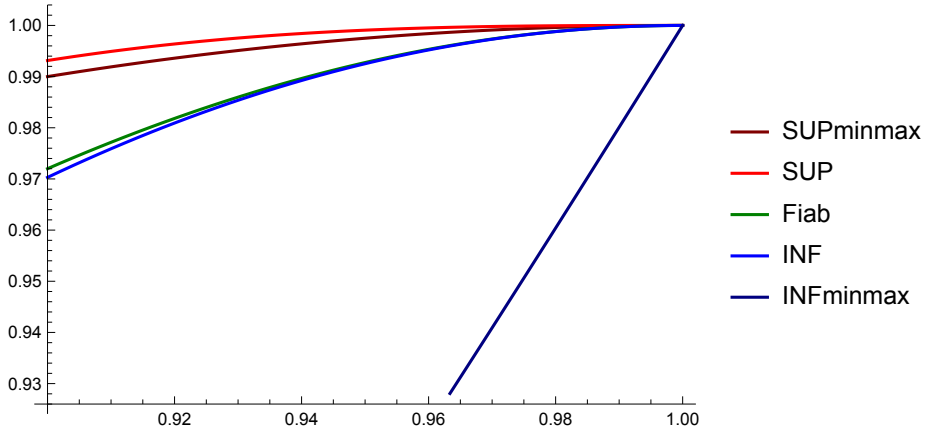

```
Plot[{1 - (1 - p)^2, 1 - (1 - p^2)^3, p^2 (3 - 2 p), (1 - (1 - p)^2)^3, p^2}, {p, 0, 1},
 PlotLegends → Placed[{"SUPminmax", "SUP", "Fiab", "INF", "INFminmax"}, Right],
 PlotStyle → {RGBColor[.5, 0, 0], RGBColor[1, 0, 0],
   RGBColor[0, .5, 0], RGBColor[0, 0, 1], RGBColor[0, 0, .5]}]
```




```
Plot[{1 - (1 - p)^2, 1 - (1 - p^2)^3, p^2 (3 - 2 p), (1 - (1 - p)^2)^3, p^2}, {p, 0, .1},
 PlotLegends → Placed[{"SUPminmax", "SUP", "Fiab", "INF", "INFminmax"}, Right],
 PlotStyle → {RGBColor[.5, 0, 0], RGBColor[1, 0, 0],
   RGBColor[0, .5, 0], RGBColor[0, 0, 1], RGBColor[0, 0, .5]}]
```

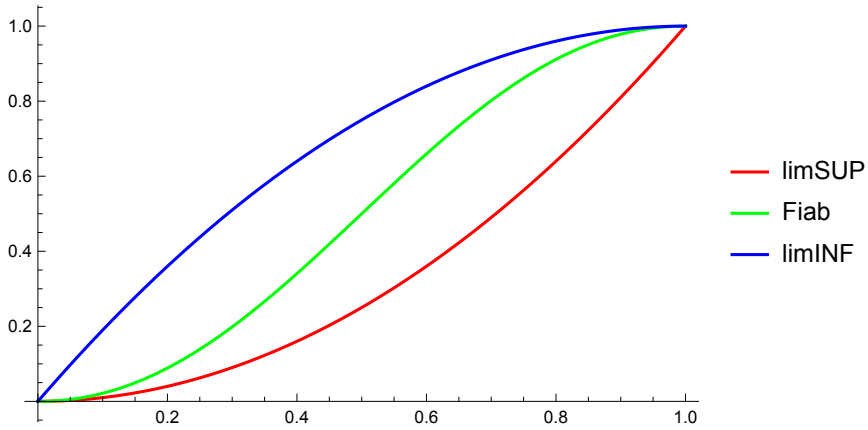
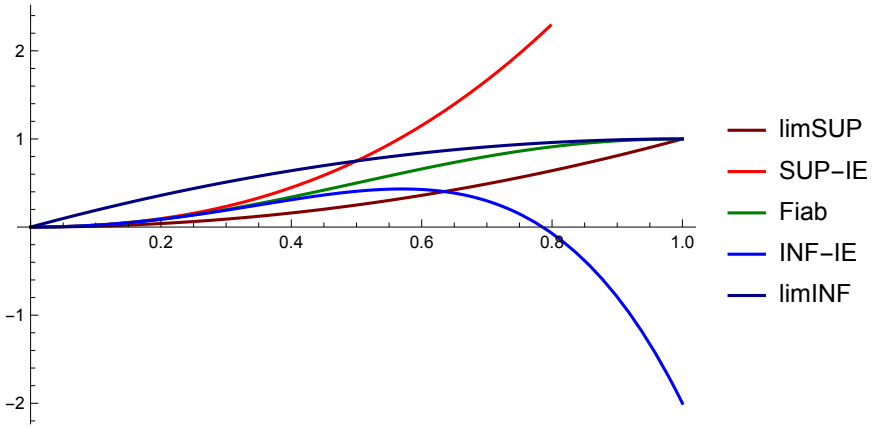


```
Plot[{1 - (1 - p)^2, 1 - (1 - p^2)^3, p^2 (3 - 2 p), (1 - (1 - p)^2)^3, p^2}, {p, 0.9, 1},
 PlotLegends → Placed[{"SUPminmax", "SUP", "Fiab", "INF", "INFminmax"}, Right],
 PlotStyle → {RGBColor[.5, 0, 0], RGBColor[1, 0, 0],
   RGBColor[0, .5, 0], RGBColor[0, 0, 1], RGBColor[0, 0, .5]}]
```



Exercício 1.74

```
Plot[{p^2, 2 p^2 + 2 p^3 - 5 p^4 + 2 p^5, 1 - (1 - p)^2}, {p, 0, 1},
 PlotLegends → Placed[{"limSUP", "Fiab", "limINF"}, Right],
 PlotStyle → {RGBColor[1, 0, 0], RGBColor[0, 1, 0], RGBColor[0, 0, 1]}]
```



```
Plot[{p^2, 2 p^2 + 2 p^3, 2 p^2 + 2 p^3 - 5 p^4 + 2 p^5, 2 p^2 + 2 p^3 - 5 p^4 - p^5, 1 - (1 - p)^2}, {p, 0, 1},
 PlotLegends → Placed[{"limSUP", "SUP-IE", "Fiab", "INF-IE", "limINF"}, Right],
 PlotStyle → {RGBColor[.5, 0, 0], RGBColor[1, 0, 0],
   RGBColor[0, .5, 0], RGBColor[0, 0, 1], RGBColor[0, 0, .5]}]
```