

Exponentialfunktionen und ihr schnelles Wachstum

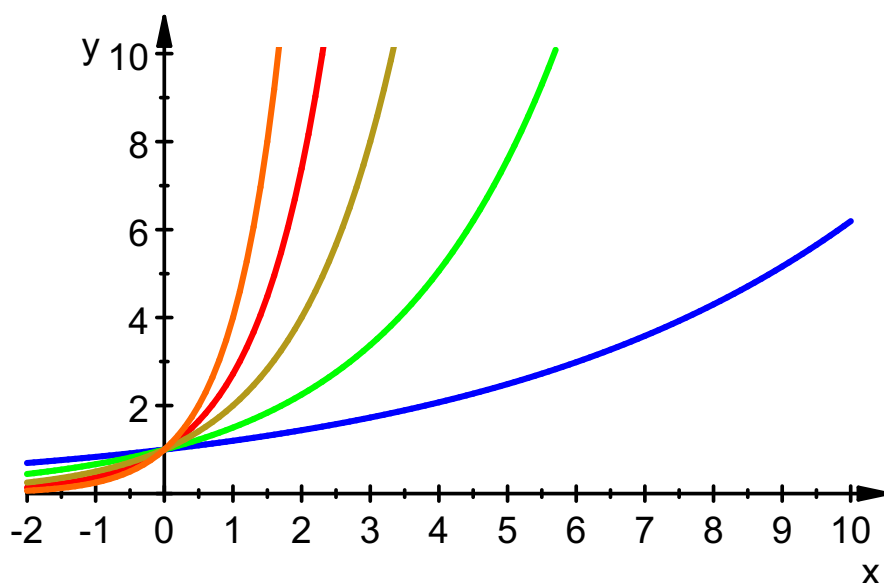
Prof. Dr. Dörte Haftendorn, MuPAD 4, Aug 08 Update 27. Aug 08

<http://haftendorn.uni-lueneburg.de> www.mathematik-verstehen.de

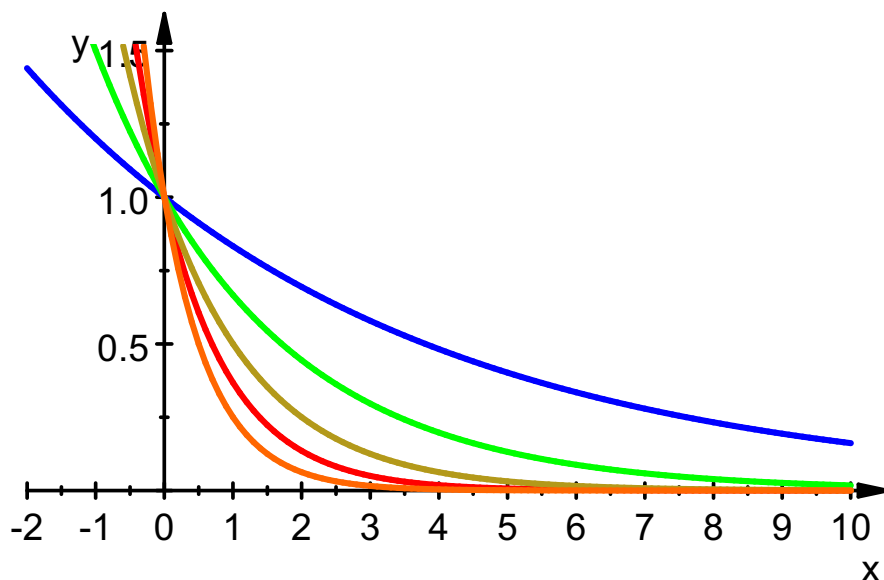
www.mathematik-sehen-und-verstehen.de

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```
plotfunc2d(1.2^x,E^x,1.5^x,2^x,4^x,x=-2..10, LegendVisible=FALSE,
ViewingBoxYRange=0..10,AxesLineWidth=0.5, AxesTitleFont=["Arial", 14],TicksLabelFont=["Arial",14],
LineWidth=0.8)
```



```
plotfunc2d(1.2^(-x),E^(-x),1.5^(-x),2^(-x),4^(-x),x=-2..
10, LegendVisible=FALSE, ViewingBoxYRange=0..1.5,AxesLineWidth=0.5, AxesTitleFont=["Arial",
14],TicksLabelFont=["Arial",14], LineWidth=0.8)
```



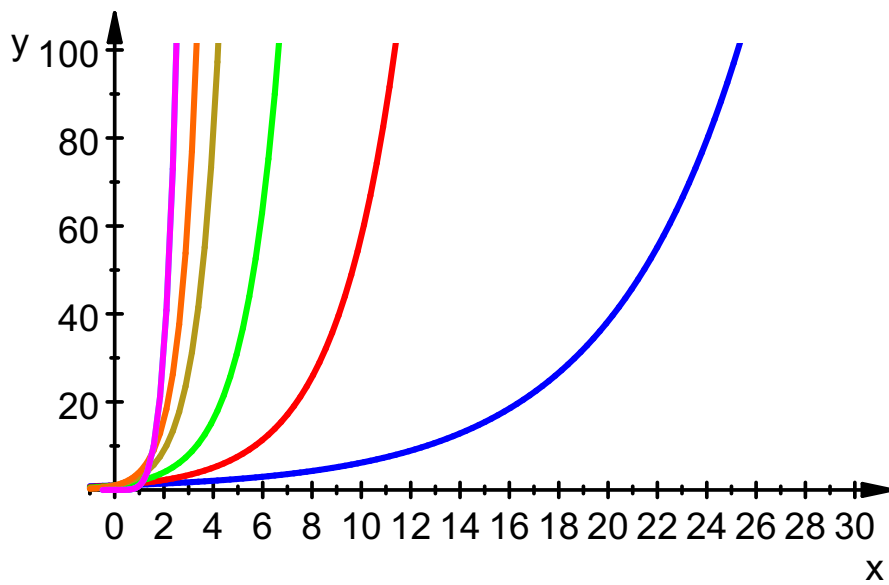
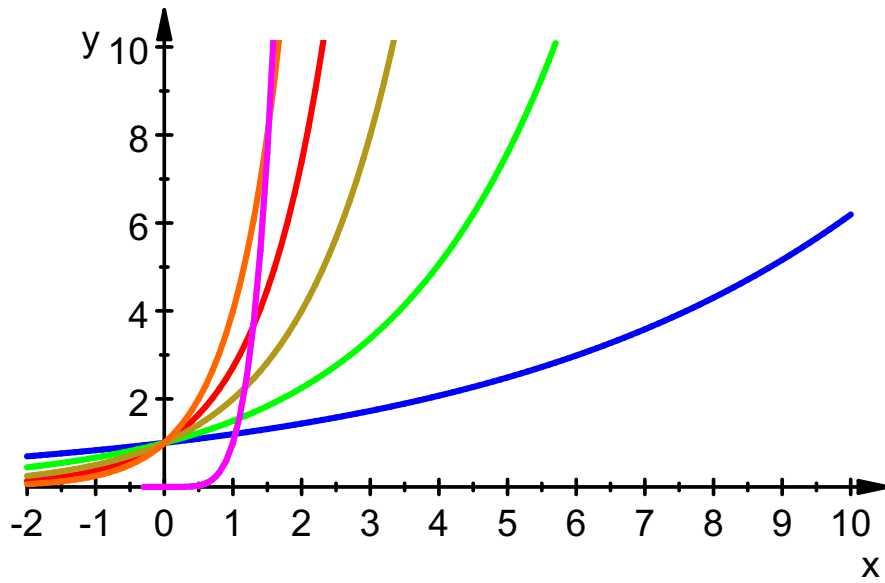
Die nachfolgenden Bilder zeigen in lila das Polynom $y=x^5$ im Vergleich mit Exponentialfunktionen.

Es wird jeweils ein anderes Fenster dargestellt.

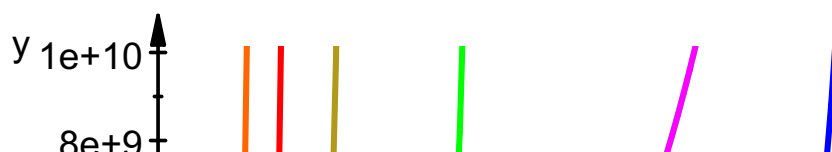
1

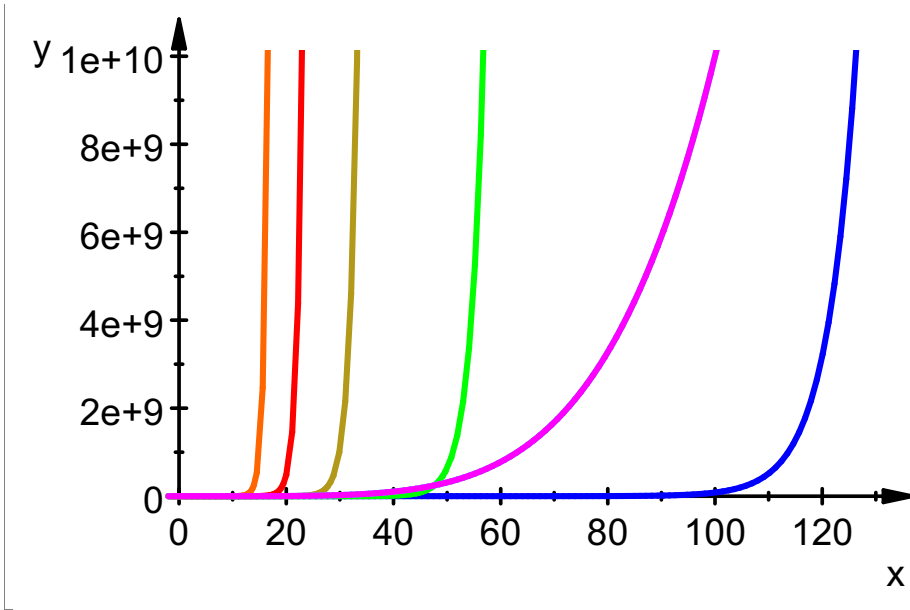
```
plotfunc2d(1.2^x,E^x,1.5^x,2^x,4^x,x^5,x^5,x=-2..10,
LegendVisible=FALSE, ViewingBoxYRange=0..10,AxesLineWidth=0.5, AxesTitleFont=["Arial",
```

```
14], TicksLabelFont=["Arial", 14], LineWidth=0.8)
```



```
plotfunc2d(1.2^x, E^x, 1.5^x, 2^x, 4^x, x^5, x^5, x=-2..130,  
LegendVisible=FALSE, ViewingBoxYRange=0..10^10, AxesLineWidth=0.5, AxesTitleFont=["Arial",  
14], TicksLabelFont=["Arial", 14], LineWidth=0.8)
```





```
plotfunc2d(1.2^x,E^x,1.5^x,2^x,4^x,x^5,x^5,x=-2..1500,
LegendVisible=FALSE, ViewingBoxYRange=0..10^100,AxesLineWidth=0.5, AxesTitleFont=["Arial",
14],TicksLabelFont=["Arial",14], LineWidth=0.8)
```

