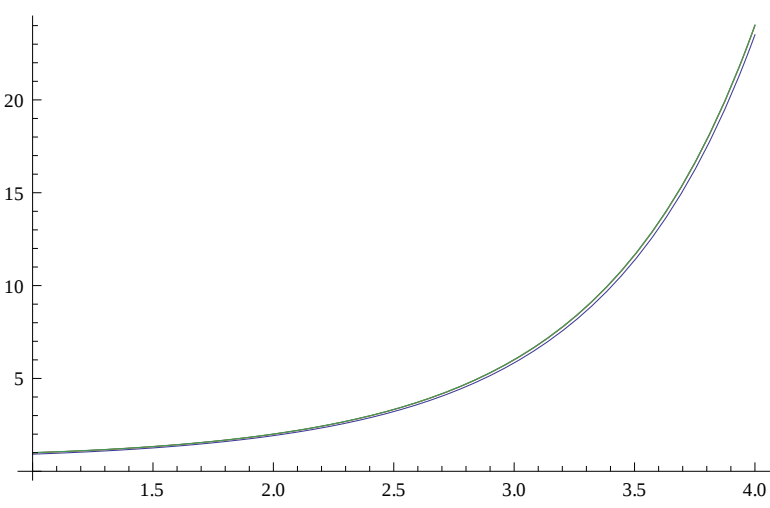


$$\left(\frac{n}{e}\right)^n \sqrt{2 \pi n} < n! < \left(\frac{n}{e}\right)^n \sqrt{2 \pi n} \left(1 + \frac{1}{11 n}\right)$$

```
Plot[Tooltip[{(n/e)^n Sqrt[2 π n], n!, Gamma[n+1], (n/e)^n Sqrt[2 π n] (1 + 1/(11 n))}], {n, 1, 4}]
```



```
In[1]:= Plot[Tooltip[(n)!], {n, 1, 4}]
```

