**Expanding Powers of (x + 1)**

Expand *(x + 1)****2***

Now find the expanded version of *(x + 1)****3***

Now try to expand *(x + 1)****4***

You may have noticed patterns developing.

If so, **predict** *(x + 1)****5*** and check your result.

Finally, use your results to expand these and check your results.

*(x + y)****3***

(a + 2b)***4***

(x + 1/x)***4***