

Values of  $A(m, n)$

$m \backslash n$	0	1	2	3	4	n
0	1	2	3	4	5	$n + 1$
1	2	3	4	5	6	$n + 2 = 2 + (n + 3) - 3$
2	3	5	7	9	11	$2n + 3 = 2 \cdot (n + 3) - 3$
3	5	13	29	61	125	$2^{(n+3)} - 3$
4	13	65533	$2^{65536} - 3$	$2^{2^{65536}} - 3$	$2^{2^{2^{65536}}} - 3$	$\underbrace{2^{2^{\dots^2}}}_{n+3} - 3$
	$= 2^{2^2} - 3$	$= 2^{2^{2^2}} - 3$	$= 2^{2^{2^{2^2}}} - 3$	$= 2^{2^{2^{2^{2^2}}}} - 3$	$= 2^{2^{2^{2^{2^{2^2}}}}} - 3$	