Sets + Power sets

A	$P(A)$	$\lvert A \rvert$	$\lvert P(A) \rvert$
$\emptyset$	$\{\emptyset\}$	0	1
$\{1\}$	$\{\emptyset, \{1\}\}$	1	2
$\{1,2\}$	$\{\emptyset, \{1\}, \{2\}, \{1,2\}\}$	2	4
$\{1,2,3\}$	$\{\emptyset, \{1\}, \{2\}, \{3\}, \{1,2\}, \{1,3\}, \{2,3\}, \{1,2,3\}\}$	3	8
$\{1,2,3,4\}$	$\{\emptyset, \{1\}, \{2\}, \{3\}, \{1,2\}, \{1,3\}, \{2,3\}, \{1,2,3\}, \{4\}, \{1,4\}, \{2,4\}, \{3,4\}, \{1,2,4\}, \{1,3,4\}, \{2,3,4\}, \{1,2,3,4\}\}$	4	16
	Inductively, $P(\{1,\dots,n\}) = P(\{1,\dots,n-1\}) \cup \{\{n\} \cup S \mid S \in P(\{1,\dots,n-1\})\}$ has twice as many elements as $P(\{1,\dots,n-1\})$.	n	2^n