

Fill in the Blanks

Roots of Quartic Equations

Quartic Equation	α	β	γ	δ	$\sum \alpha$	$\sum \alpha\beta$	$\sum \alpha\beta\gamma$	$\sum \alpha\beta\gamma\delta$
z^4	-1	2	1	-3				
z^4	4	-1	-2					16
$6z^4 - 29z^3 - 9z^2 + 21z - 5 = 0$		5	-1	$\frac{1}{2}$				
$2z^4 - 3z^3 - 12z^2 + 7z + 6 = 0$			1	-2				
z^4	1	2	$1+i$	$1-i$				
z^4	$1+2i$		-2					-40
$3z^4 - 11z^3 + 9z^2 + 13z - 10 = 0$	$\frac{2}{3}$		$2-i$					
z^4	$1+i$			$3-i$				
$3z^4$		$\frac{1+i}{3}$			$-\frac{10}{3}$	$\frac{25}{3}$	$\frac{2}{3}$	$\frac{10}{3}$