

$x$	0	Arccos $k$		$\pi$
$f'(x)$	+		0	-
$f$	<p>The graph shows a piecewise linear function <math>f(x)</math> on the interval <math>[0, \pi]</math>. The function starts at the point <math>(0, 0)</math>, increases linearly to a maximum value of 1 at <math>x = \arccos(k)</math>, and then decreases linearly to the point <math>(\pi, 0)</math>. The peak of the function is labeled with the value 1.</p>			