ALG 2 PSAT/SAT PRACTICE Fri, March 27, 2020

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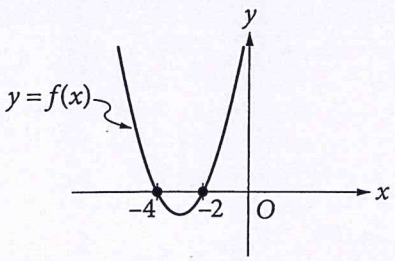

The function f is graphed in the xy-plane above. If $f(x) = x^2 + kx + 8$, where k is a constant, what is the value of k ?

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Answers

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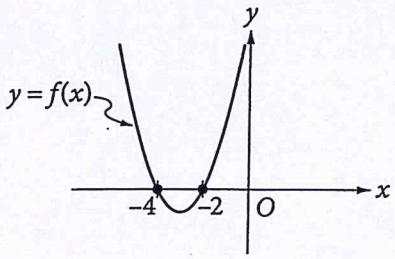

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- zeros of -4 & -2 lead to these factors:

$(x+4)(x+2)$

- expand these factors $(x+4)(x+2)$

	x	$+4$
x	x^2	$+4x$
$+2$	$+2x$	$+8$

$= x^2 + 6x + 8$

$k = 6$