

Find Trial Functions:

$y'' + \dots$	$0 \leq x \leq 10$ $y(0) = 0$ $y(10) = 0$	$0 \leq x \leq 1$ $y(0) = 0$ $y(1) = 0$	$0 \leq x \leq 1$ $y(0) = 0$ $y(1) = 1$
$y'' + 50 = 0$	$a_1 x(10-x)$	$a_1 x(1-x)$	$a_1 x(1-x) + x$
$y'' + 50x = 0$	$a_1 x^2(10-x)$	$a_1 x^2(1-x)$	$a_1 x^2(1-x) + x$
$y'' + 50x^2 = 0$	$a_1 x^3(10-x)$	$a_1 x^3(1-x)$	$a_1 x^3(1-x) + x$