

## Problem Wk.8.4.3: Controller gains

Use your system functions from Homework 2 to find the best gain (the one with smallest dominant pole)  $k_c$  for the head controller, given the following values for the sensor gain  $k_s$ .

Use the following values for the other parameters:

- $k_m = 250$
- $k_b = 0.48$
- $r_m = 4.5$
- $T = 0.02$

$k_s$	Mag dominant pole	$k_c$
1		3.2
2		1.6
3		16/15
4		0.8

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