

In the following problems, the characteristics of a function are given. Use this information to sketch the graph of the function.

	Problem 1	Problem 2	Problem 3	Problem 4	Problem 5	Problem 6
Asymptotes	None	$y=2$	$y=2$	$x=0, x=3, y=0$	$x=3/2, y=1$	$x=-2$
Intercepts	$(0,0), (6,0)$	$(-3,0), (0,0), (3,0)$	$(0,0)$	None	$(0,0)$	$(-1,0), (1,0), (3,0), (0,2)$
$f'(x) = 0$	$(4,8)$	$(0,0), (-2,-2), (2,-2)$	$(0,0)$	$(3/2,2)$	$(0,0)$	$(0,2), (-3,3), (2,-2)$
$f'(x) > 0$	$(-\infty, 4)$	$(-2,0), (2,\infty)$	$(0,\infty)$	$(3/2,3)$	$(0,3/2)$	$(-3,-2), (-2,0), (2,\infty)$
$f'(x) < 0$	$(4,\infty)$	$(-\infty,-2), (0,2)$	$(-\infty,0)$	$(-\infty,3/2), (3,\infty)$	$(-\infty,0), (3/2,\infty)$	$(-\infty,-3), (0,2)$
$f''(x) = 0$	$(0,0), (2,3)$	$(-3,0), (3,0), (-1,-1), (1,-1)$	$(-1,1), (1,1)$	None	$(-1,1/2)$	$(1,0)$
$f''(x) > 0$	$(0,2)$	$(-3,-1), (1,3)$	$(-1,1)$	$(0,3), (3,\infty)$	$(-1,3/2), (3/2,\infty)$	$(-\infty,-2), (1,\infty)$
$f''(x) < 0$	$(-\infty,0), (2,\infty)$	$(-\infty,-3), (-1,1), (3,\infty)$	$(-\infty,-1), (1,\infty)$	$(-\infty,0)$	$(-\infty,-1)$	$(-2,1)$