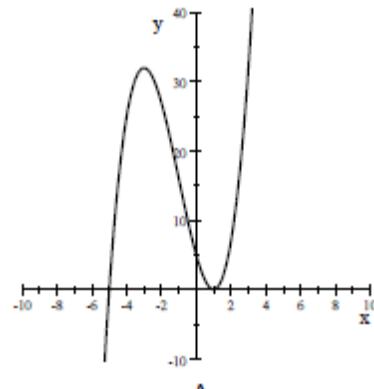


MA 22000 Fall 2013
Answers to Exam 3

Problem	Form A	Form B	Actual Answer
1)	B.	D.	$x = \frac{1}{3}$
2)	A.	D.	$f'(x) = x^3(e^x)(x+4)$
3)	C.	B.	$y' = 5(x^2 + \ln x)^4 \left(2x + \frac{1}{x}\right)$
4)	This question will not be scored.		
5)	A.	C.	\$6993.62
6)	B.	E.	II and III only
7)	C.	D.	The solution is at least 20. ($x = 27$)
8)	A.	B.	$f'(x) = \frac{5x^2 + 1}{x(x^2 + 1)}$
9)	E.	C.	(0, 2)
10)	B.	C.	f is decreasing on the interval $\left(\frac{3}{4}, \infty\right)$.
11)	A.	E.	\$24,768
12)	D.	D.	$x = 1$



- 13) A. A.
- 14) D. A. (2, -2)
- 15) E. D. There is a relative maximum for this function.
- 16) D. E. $2e^{x^2}(2x^2 + 1)$
- 17) C. E. $a + 2c$