MA 15200 Exam 3 Answers, Fall 2010

Problem	Form A	Form B	Actual Answer
1)	A	C	I and II only
2)	A	D	$f(-2) = -1, \qquad f(-1) = -5, \qquad f(2) = 1$
3)	C	A	The line $y = 5$ has undefined slope.
4)	D	D	(Graph)
5)	C	D	$\dfrac{3}{2}$
6)	B	E	$y = \dfrac{2}{9}x + 5$
7)	D	B	Between 12 and 13 points (about 12.69)
8)	C	A	$(fg)(x) = 6x - 4$
9)	E	B	$f(x) = \sqrt[3]{x}$ and $g(x) = (4x - 3)^2$
10)	A	C	$f^{-1}(x) = \dfrac{2x + 1}{x}$
11)	A	E	$556.03
12)	E	C	$\log 100 = 10$
13)	E	B	It is between 87.2% and 90.1% (about 89.24%)
14)	B	A	$3 + \dfrac{1}{2}\log(x + y) - 5\log z$
15)	B	D	$\log_b 15 = A + B, \qquad \log_b 25 = 2B$