

MA 15200X Exam 3 Answers, Fall 2010

Problem	Form A	Form B	Actual Answer
1)	E	B	$f(3-x) = x^2 - 4x + 4$
2)	B	D	$C(m) = \begin{cases} 30 & \text{if } m \leq 200 \\ 0.2m - 10 & \text{if } m > 200 \end{cases}$
3)	D	A	$m = -\frac{20}{3}$
4)	C	C	$y = \frac{1}{2}x - 5$
5)	D	E	
6)	B	C	slope: $\frac{6}{11}$, y-intercept: $-\frac{5}{11}$
7)	E	B	I only
8)	E	D	It is between 190 and 195 pounds. (about 192.8 lb.)
9)	A	B	Domain of $f : (-\infty, -9) \cup (-9, \infty)$ Domain of $g : [1, \infty)$
10)	C	A	$f^{-1}(x) = \frac{8}{x+2}$
11)	A	E	11.5%
12)	D	B	
13)	B	E	15.6 grams
14)	C	A	$\log_2 \left(\frac{x^{13}}{49} \right)$
15)	B	D	$\log_8 \left(\frac{16}{m} \right) = 2 - \log_8 m$