Exam 3A

Question #	Form A Summer 2012	Answer
1	C	$(-\infty, -2] \cup [0, 2)$
2	D	$y = -2(x - 3)^2 + 4$
3	A	See graph on exam
4	D	$(f \circ g)(0)$ is undefined $(g \circ f)(0) = \dfrac{1}{2}$
5	A	$x = -\dfrac{1}{2}; x = 3$
6	A	$(-\infty, 0] \cup \left[\dfrac{16}{81}, \infty\right)$
7	C	$(-\infty, -2) \cup (3, \infty)$
8	A	See graph on exam
9	E	48
10	E	No solution
11	-	$\left(2 + \sqrt{7}, 7 + 4\sqrt{7}\right); \left(2 - \sqrt{7}, 7 - 4\sqrt{7}\right)$
12	B	1
13	-	$x = \dfrac{400}{3}; y = 100$
14	B	$B(x) = \begin{cases} 0.00361x, & if\ x \le 5{,}000 \\ 0.00417x - 2.8, & if\ x > 5{,}000 \end{cases}$
15	A	$x = 90\dfrac{ft}{sec}; y = 50$ feet