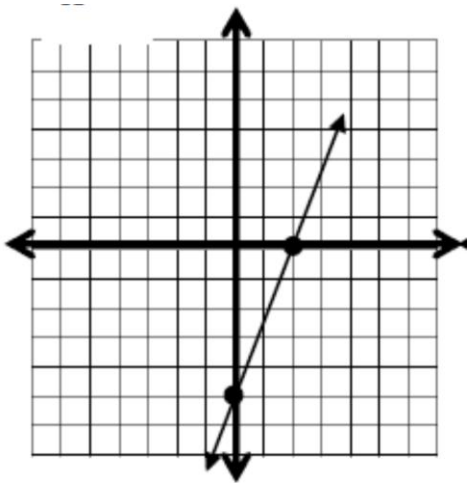
Answers MA 15200 Exam 3 Spring 2012

Problem	Form A	Form B	Actual Answer
1)	C	B	I, II, and IV (I am also counting the answer I, II, III, and IV. The textbook usually uses only open intervals for increasing/decreasing; but some students may be confused about open versus closed intervals.)
2)	D	A	$f(-2)=4, \quad f(4)=3$
3)	A	D	The function is increasing on $(-8,8)$.
4)	C	D	slope: $\frac{6}{11}$, y-intercept: $-\frac{5}{11}$
5)	B	C	$y=-\frac{2}{3}x-\frac{1}{3}$
6)	B	C	$y=\frac{5}{3}x-2$
7)	D	D	
8)	C	A	$y=\frac{33}{2}$
9)	A	B	I and III only
10)	A	E	$f(x)=\frac{x+2}{4}$ and $g(x)=4x-2$
11)	C	C	\$620.89
12)	B	E	The graph will represent an increasing function.
13)	D	B	$\log\left(\frac{8x^2}{\sqrt{x+1}}\right)$
14)	E	D	$x=25$
15)	B	B	Between 3 and 3.5 pounds (about 3.17 lb.)