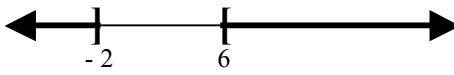


MA 15200
Exam 2 Answers, Spring 2011

Problem	Actual Answer
1) <i>B</i>	Between 3 and 4 hours $\left(3\frac{1}{13}\right)$
2) <i>C</i>	$x = 3 + 11i, \quad y = 28 - 17i$
3) <i>D</i>	$\left(x - \frac{7}{2}\right)^2 = \frac{53}{4}$
4) <i>C</i>	$a = -2 - 2\sqrt{3}$
5) <i>C</i>	II and III only
6) <i>A</i>	$4x^2 - 108x + 245 = 0$
7) <i>E</i>	5 seconds
8) <i>B</i>	There is one solution and it is negative.
9) <i>E</i>	$x = 2, -2, \sqrt{6}, -\sqrt{6}$ only
10) <i>D</i>	
11) <i>A</i>	distance: $2\sqrt{29}$, midpoint: $(-2, 3)$
12) <i>D</i>	$f(x+3) = x^2 + 4x + 4$
13) <i>A</i>	$f(1) = -3, \quad \text{Range: } [-3, 3]$
14) <i>A</i>	$g(1) = -2, \quad g(3) = -2$
15) <i>E</i>	line 1: $m = -\frac{4}{5}, \quad \text{line 2: } m = -\frac{1}{3}$