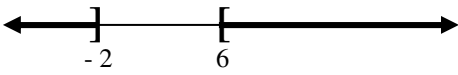


**MA 15200 and 15200X
Exam 2 Answers, Spring 2011**

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