

MA 11100 Exam 3 Answers, Fall 2010

| <u>Problem</u> | <u>Form A</u> | <u>Actual Answer</u> |
|----------------|---------------|---|
| 1) | E | $\left(\frac{19}{14}, \infty\right)$ |
| 2) | B | There are two solutions, both positive. (2, 11) |
| 3) | C | $-2 \leq x \leq \frac{5}{2}$ |
| 4) | D | $24x + 4y$ |
| 5) | A | $(x+3y)(x-3y) = 2x - 9y^2$ |
| 6) | B | $a + 2b$ |
| 7) | D | $x^2 + 7x - 10$ |
| 8) | D | $2x + 3$ |
| 9) | B | $7a(x^2 + 4)(x + 2)(x - 2)$ |
| 10) | A | $x = -1, \frac{1}{2}$ |
| 11) | C | $\frac{x^2}{8(x+4)}$ |
| 12) | E | $-3, -2, 0$ only |
| 13) | C | $1500 + 0.25(b - 1500) < 1200 + 0.3(b - 1200)$ |
| 14) | D | Between 2.8 and 3.2 hours (3 hr.) |
| 15) | C | $2x^2 - 23x + 30 = 0$ |