

MA 15200, Exam 2 Answers, Fall 2009

	<u>Form A</u>	<u>Form B</u>
<u>1.</u>	C $2.95x + 3.5(20 - x) = 2.2(20)$	D $105 - 30i$ volts
<u>2.</u>	E $105 - 30i$ volts	D $x = 1 \pm \frac{\sqrt{10}}{2}$
<u>3.</u>	D $(x - 15)^2 = 213$	B $(x - 15)^2 = 213$
<u>4.</u>	A $x = 1 \pm \frac{\sqrt{10}}{2}$	E $2.95x + 3.5(20 - x) = 2.2(20)$
<u>5.</u>	C 12 hours	A 12 hours
<u>6.</u>	B It is at least 3, but less than 5.	C $\left(\frac{15}{2}, \infty\right)$
<u>7.</u>	A There is a solution between -6 and -3.	B $M\left(\frac{5}{2}, -\frac{1}{2}\right)$
<u>8.</u>	B $\left(\frac{15}{2}, \infty\right)$	C It is at least 3, but less than 5.
<u>9.</u>	E $M\left(\frac{5}{2}, -\frac{1}{2}\right)$	B There is a solution between -6 and -3.
<u>10.</u>	B $f(1) = -1, [-3, 1]$	C $y = 54$
<u>11.</u>	C $f(x) = \begin{cases} -x^2 & \text{if } x \leq -1 \\ x+1 & \text{if } x > -1 \end{cases}$	D These lines are perpendicular.
<u>12.</u>	B These lines are perpendicular.	C $f(x) = \begin{cases} -x^2 & \text{if } x \leq -1 \\ x+1 & \text{if } x > -1 \end{cases}$
<u>13.</u>	A $3x - 4y = -18$	D $3x - 4y = -18$
<u>14.</u>	C $y = 54$	E None of the above. ($y = -\frac{3}{4}x - 2$)
<u>15.</u>	E None of the above. ($y = -\frac{3}{4}x - 2$)	A $f(1) = -1, [-3, 1]$