

MA 22000 Exam 1 Answers, Fall 2013

Problem	Form A	Form B	Actual Answer
1)	<i>D</i>	<i>B</i>	$-22r^2 - 58r + 52$
2)	<i>A</i>	<i>C</i>	$\left(-\infty, \frac{9}{2}\right]$
3)	<i>B</i>	<i>E</i>	$-r^2 - 2r + 5$
4)	<i>B</i>	<i>C</i>	$[-6, 2]$
5)	<i>E</i>	<i>E</i>	$8x^3 - 108x^2 + 486x - 729$
6)	<i>B</i>	<i>E</i>	I and III only
7)	<i>A</i>	<i>D</i>	Area = $\frac{11}{2}x^2 + \frac{33}{2}x + 13$
8)	<i>C</i>	<i>D</i>	x is at least 0, but less than 1. ($x = \frac{4}{9}$)
9)	<i>D</i>	<i>A</i>	No Solution (5 makes a 0 denominator)
10)	<i>D</i>	<i>B</i>	20 minutes
11)	<i>D</i>	<i>B</i>	$0.2x + 0.6(2 - x) = 0.35(2)$
12)	<i>D</i>	<i>B</i>	-5
13)	<i>D</i>	<i>E</i>	1 $\frac{3}{4}$ hours
14)	<i>C</i>	<i>C</i>	The largest angle is at least 80, but less than 90 degrees (84°)
15)	<i>A</i>	<i>D</i>	$x = \frac{33}{20}$