

## MIDTERM REVIEW

### January 2012 (PART I)

- |     |   |     |         |     |   |
|-----|---|-----|---------|-----|---|
| 1.  | B | 21. | D       | 41. | B |
| 2.  | B | 22. | C       | 42. | C |
| 3.  | A | 23. | D       | 43. | B |
| 4.  | C | 24. | D       | 44. | C |
| 5.  | B | 25. | B       | 45. | C |
| 6.  | D | 26. | A       | 46. | D |
| 7.  | B | 27. | A       | 47. | D |
| 8.  | C | 28. | C       | 48. | A |
| 9.  | A | 29. | D       | 49. | D |
| 10. | C | 30. | C       | 50. | A |
| 11. | A | 31. | C       | 51. | D |
| 12. | C | 32. | B       | 52. | D |
| 13. | A | 33. | B       | 53. | A |
| 14. | B | 34. | D       | 54. | B |
| 15. | A | 35. | A       | 55. | B |
| 16. | D | 36. | C       |     |   |
| 17. | D | 37. | Danny's |     |   |
| 18. | A | 38. | C       |     |   |
| 19. | C | 39. | C       |     |   |
| 20. | C | 40. | A       |     |   |

## PART II:

1.  $(x, y, z) = (-2, 5, 4)$

2. 2L in red, 4l in blue

3.  $h = -1.5t^2 + 2.5t + 2$

4.  $(x, y) \rightarrow (2x - 90^\circ, -y + 3)$

$$\begin{array}{c|cccccc} X & -90 & 90 & 270 & 450 & 630 \\ Y & 2 & 3 & 4 & 3 & 2 \end{array}$$

5.  $\frac{1}{3}(y - 1) = \cos 9x$

$$\frac{1}{3}(y - 1) = \sin 9(x - 30)$$

6.  $45^\circ, 315^\circ$

7.  $(4, -2, 2)$

8. \$3.50, \$5.50

9.  $h = -0.5t^2 + 5t = 1$

10.  $(x, y) \rightarrow (\frac{1}{2}x + 90^\circ, -4y - 2)$

$$\begin{array}{c|ccccc} X & 90 & 135 & 180 & 225 & 270 \\ Y & -6 & -2 & 2 & -2 & -6 \end{array}$$

11.  $\frac{1}{6}(y - 8) = \cos \frac{15}{2}(x - 6)$

$$\frac{1}{6}(y - 8) = \sin \frac{15}{2}(x - 42)$$

12.  $\frac{3 + \sqrt{3}}{2}$

13.  $225^\circ, 315^\circ$