

MATH 142 – Exam 1 – Solutions

- | | | |
|------------------------------------|-------------------------------------|---|
| 1. B | 2. D | 3. D |
| 4. A | 5. B | 6. $r = .9829, y = 7.619x + 8.704$ |
| 7. 84.9 pounds | 8. 8.7 years | 9. B |
| 10. -12 | 11. $X = 4$ | 12. $X = 2, -1$ |
| 13. opens up, | 13. left 2α | 13. expanded by a factor of 3 |
| 13. Up $4\beta - 12\alpha$ squared | 14. $p = -.5x + 1000$ | 15. $R = -.5x^2 + 1000x$ |
| 16. 1000 people | 17. 6.18% | 18. \$4004.69 |
| 19. A | 20. moved right A | 20. and up B |
| 20. Parabola | 20. Contracted by a factor of $1/2$ | 21. false |
| 22. $2x + h + 1$ | 23. Incr $(-1, 0)$ | 23. Decr $(-\infty, -1), (0, \infty)$ |
| 24. -5 | 25. $\sqrt{3x - 5}$ | 26. Cubic, best r-squared, and fits model |