|  |  |  |  |
| --- | --- | --- | --- |
| Initial Investment | Interest Rate | Time to Double | Amount After 5 Years |
| $35,000 | 6.2% | **11.18 years** | **$47719.88** |
| $5000 | **7.1%** | **9.76 years** | $7,130.90 |
| **$7500** | 8.4% | **8.25 years** | $11,414.71 |
| **$12800** | **6.3%** | 11 years | $17,539.32 |

**Pre-Calculus Chapter 3**

**Exponential and Logarithmic Word Problems**

ANSWER KEY

2. 64 lbs, 63.6 years

3. 3573.5 years old

4. 6.18 x 1014 (618 trillion)

5. P = 226, 5.92 days

6. 0.273 x 10-12 grams

7. 90 units, 32.87 units

8. 15.7 years

9. 22.17%

10. 12.14 years

11. 1127.5 bacteria, 69 hours

12. 7.967 years (1/2 life), 26.47 years

13. 5832mosquitoes

 3.92 days

14. 9.8 grams

15. $2246.64