

Name _____

Chapter 9 Test

You are welcome to print this and then take a picture of all of your work and upload it to Google Classroom. If you do not print it, show all of your work on a separate sheet of paper, take a picture, and upload it to the Google Classroom.

I. Describe the pattern in each sequence, then list the next three terms.

25, 18, 11, 4, ...

1. Describe the pattern: _____

2. Next three terms: _____, _____, _____

8, 14, 20, 26, ...

3. Describe the pattern: _____

4. Next three terms: _____, _____, _____

300, 150, 75, 37.5, ...

5. Describe the pattern: _____

6. Next three terms: _____, _____, _____

II. Identify each sequence as *arithmetic*, *geometric*, or *neither*.

7. 6, 12, 24, 48, ... _____

8. 1, 4, 9, 16, ... _____

9. -23, -19, -15, -11, ... _____

III. Evaluation each function for $x = 0, 1$, and 2 . *You do not have to use the chart, but it's there if you want it.

10. $y = x^2 - 10$ _____

11. $y = x - 3$ _____

III. Solve each formula for n .

12. $PV = nRT$ _____

13. $3n - p = 6m$ _____

IV. Find the *simple interest* earned in each account. *You are permitted to use a calculator on this portion, but you must show me your steps.

***Remember, you are dealing with money, so round appropriately. $I = prt$**

14. \$7,000 _____
10%
4 years

15. \$800 _____
4.5%
3 years

16. \$10,500 _____
8%
6 months

V. Find the balance. *Remember, you are dealing with money, so round appropriately. $B = p(1 + r)^t$

17. \$1,400 _____
5.5%
3 years

18. \$5,200 _____
5%
4 years