Intro to Sequences **Name**_____

Find the next 3 terms for each of the sequences below—can you find the pattern? ☺

1. 4, 11, 18, 25, ___, ___, ___

b.) arithmetic, geometric, neither

c.) Explicit Rule:

d.) Recursive Rule:

2. 37, 33, 29, 25, ___, ___, ___

b.) arithmetic, geometric, neither

c.) Explicit Rule:

d.) Recursive Rule:

3. 2, 6, 18, 54, ___, ___, ___

b.) arithmetic, geometric, neither

c.) Explicit Rule:

d.) Recursive Rule:

4. 5, -10, 20, -40, ___, ____, ____

b.) arithmetic, geometric, neither

c.) Explicit Rule:

d.) Recursive Rule:

5. 1, b, b^2, b^3, ___, ____. ___

b.) arithmetic, geometric, neither

c.) Explicit Rule:

d.) Recursive Rule:

6. 16, 4, 1, $\frac{1}{4}$, ____, ____, ____

b.) arithmetic, geometric, neither

c.) Explicit Rule:

d.) Recursive Rule:

7. 50, -10, 2, $-\frac{2}{5}$, ____, _____, _____

b.) arithmetic, geometric, neither

c.) Explicit Rule:

d.) Recursive Rule:

8. 17, 10, 3, -4, ____, ____, ____

b.) arithmetic, geometric, neither

c.) Explicit Rule:

d.) Recursive Rule:

9. a, $a+d$, $a+2d$, $a+3d$, _____, _____, _____

b.) arithmetic, geometric, neither

c.) Explicit Rule:

d.) Recursive Rule:

10. 2, 5, 10, 17, ____, ____, ____

b.) arithmetic, geometric, neither

c.) Explicit Rule:

d.) Recursive Rule:

11. 5.3, 6, 6.7, 7.4, ____, ____, ____

b.) arithmetic, geometric, neither

c.) Explicit Rule:

d.) Recursive Rule:

12. 1, 1, 2, 3, 5, ____, ____, ____

b.) arithmetic, geometric, neither

c.) Explicit Rule:

d.) Recursive Rule:

13. 1, 4, 9, 16, 25, ____, ____, ____

b.) arithmetic, geometric, neither

c.) Explicit Rule:

d.) Recursive Rule:

14. $\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \frac{4}{5}$, ____, _____, _____

b.) arithmetic, geometric, neither

c.) Explicit Rule:

d.) Recursive Rule:

15. 15, 7, -1, -9, ____, ____, ____

b.) arithmetic, geometric, neither

c.) Explicit Rule:

d.) Recursive Rule:

16. $2a-2b$, $3a-b$, $4a$, $5a+b$, _____, _____, _____

b.) arithmetic, geometric, neither

c.) Explicit Rule:

d.) Recursive Rule:

17. 1, 8, 27, 64, 125, _____, _____, _____

b.) arithmetic, geometric, neither

18. 11, 101, 1001, 10001, _____, _____, _____

b.) arithmetic, geometric, neither