

Alg 2
Ch 11

Sec 11.1-11.3 Review SHOW ALL WORK!

For each sequence:

- a) Identify as arithmetic, geometric, or neither.
- b) If arithmetic, find d . If geometric, find r . If neither, describe pattern.
- c) If arithmetic or geometric, write a recursive and explicit formula. If neither, write a recursive or explicit formula. (Hint: relate it to its term #)
- d) Find next 3 terms.

- 1. 15, 30, 45, 60, ...
- 2. 2, 6, 18, 54, ...
- 3. 5, 6, 8, 11, ...
- 4. 37, 34, 31, 28, ...
- 5. 700, 350, 175, 87.5, ...
- 6. 4, 2, 0, -2, ...
- 7. 1, 4, 9, 16, ...
- 8. -5, 10, -20, 40, ...

Find the 5th term of each sequence.

9. $a_1 = 100$
 $a_n = \frac{1}{2}a_{n-1}$

10. $a_1 = 2$
 $a_n = 3a_{n-1} - 2$

11. $a_n = -n + 6$

Find the missing term if

- a) the sequence is arithmetic
- b) the sequence is geometric

- 12. 8, ?, 4
- 13. 1250, ?, 50
- 14. 6, ?, 24