

Ready, Set, Go!© 2012 www.flickr.com/photos/JenniNicole**Ready**Topic: Find the missing terms for each arithmetic sequence and state the common difference, d .

1. 5, 11, ____, 23, 29, ____... common difference:
2. 7, 3, -1, ____, ____, -13... common difference:
3. 8, ____, ____, 47, 60... common difference:
4. 0, ____, ____, 2, $\frac{8}{3}$... common difference:
5. 5, ____, ____, ____, 25... common difference:

Set

Topic: Determine recursive equations

Two consecutive terms in an *arithmetic sequence* are given. Find the constant difference and the recursive equation.

6. If $f(3) = 5$ and $f(4) = 8$.

Find $f(5)$ and $f(6)$. State the recursive rule.

7. If $f(2) = 20$ and $f(3) = 12$.

Find $f(4)$ and $f(5)$. State the recursive rule.

8. If $f(5) = 3.7$ and $f(6) = 8.7$.

Find $f(7)$ and $f(8)$. State the recursive rule.

Go

Topic: Evaluate using function notation

Find each value.

9. Find $f(3)$; $f(n) = 2^n$

10. Find $f(2)$; $f(n) = 5^n$

11. Find $f(3)$; $f(n) = (-2)^n$

12. Find $f(5)$ and $f(6)$; $f(n) = 3 + 4(n - 1)$

13. Find $f(1)$ and $f(2)$; $f(n) = 2(n - 1) + 6$

Need Help? Check out these videos:

Arithmetic sequences <http://www.khanacademy.org/math/algebra/solving-linear-equations/v/patterns-in-sequences-1>

Function notation <http://www.youtube.com/watch?v=KJ3Aqov52TY>

