READY

Topic: Finding the common difference

Find the missing terms for each <u>arithmetic</u> sequence and state the common difference.

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 = _____

6. 3, _____ , _____ , _____ , -13 ...

   Common Difference = _____

SET

Topic: Writing the recursive function

Two consecutive terms in an <u>arithmetic</u> sequence are given. Find the recursive function.

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

   $f(5) =$ _____. $f(6) =$ _____. Recursive Function: _____

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

   $f(4) =$ _____. $f(5) =$ _____. Recursive Function: _____

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

   $f(7) =$ _____. $f(8) =$ _____. Recursive Function: _____

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Two consecutive terms in a <u>geometric</u> sequence are given. Find the recursive function.

10. If $f(3) = 5\ and\ f(4) = 10$ ...

   $f(5) =$ _____. $f(6) =$ _____. Recursive Function: _____

11. If $f(2) = 20\ and\ f(3) = 10$ ...

   $f(4) =$ _____. $f(5) =$ _____. Recursive Function: _____

12. If $f(5) = 20.58\ and\ f(6) = 2.94$ ...

   $f(7) =$ _____. $f(8) =$ _____. Recursive Function: _____

GO

Topic: Evaluating using function notation

Find the indicated values of $f(n)$.

13. $f(n) = 2^n$ Find $f(5)\ and\ f(0)$.

14. $f(n) = 5^n$ Find $f(4)\ and\ f(1)$.

15. $f(n) = (-2)^n$ Find $f(3)\ and\ f(0)$.

16. $f(n) = -2^n$ Find $f(3)\ and\ f(0)$.

17.   In what way are the problems in #15 and #16 different?

18. $f(n) = 3 + 4(n - 1)$ Find $f(5)$ and $f(0)$.

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