Name: Sequences | 3.3

Ready, Set, Go!

Ready

Topic: Slopes between two points

Find the slope of the line that goes through each set of points.

1. (3,7) and (5, 10)
2. (-1, 4) and (3,3)
3. (0,0) and (-2, 5)
4. (-1, -5) and (-4, -5)

Set

Topic: Finding terms for a given sequence

Find the next 3 terms in each sequence. Identify the constant difference. Write a recursive function and an explicit function for each sequence. (The first number is the 1st term, not the 0th). Circle the constant difference in both functions.

4. 3 , 8 , 13 , 18 , 23 , _____ , _____ , _____ , ... Constant Difference: _____

   Recursive Function: _____ Explicit Function: _____

5. 11 , 9 , 7 , 5 , 3 , _____ , _____ , _____ , ... Constant Difference: _____

   Recursive Function: _____ Explicit Function: _____

6. 3 , 1.5 , 0 , -1.5 , -3 , _____ , _____ , _____ , ... Constant Difference: _____

   Recursive Function: _____ Explicit Function: _____

Name: Sequences | 3.3

Go

Topic: Slope-Intercept Form

Write the equations in slope-intercept form.

7. $y = 12 + (x - 1)(-4)$

8. $\frac{2}{3}(6y + 9) = \frac{3}{5}(15x - 20)$

9. $\frac{5}{7}(21y + 7) = \frac{2}{9}(18x + 27)$

Need Help? Check out these related videos:

Finding slope
http://www.khanacademy.org/math/algebra/ck12-algebra-1/v/slope-and-rate-of-change

Writing the explicit equation
http://www.khanacademy.org/math/algebra/solving-linear-equations/v/equations-of-sequence-patterns

Writing equations in slope-intercept form
http://www.khanacademy.org/math/algebra/linear-equations-and-inequalitie/v/converting-to-slope-intercept-form