2) Find  for 

3) Find the 3 arithmetic means: 5, \_\_\_, \_\_\_, \_\_\_, -3 4) Find the 17th term if 

Mixed Sequences and Series Practice - Continued

5) 97 is the \_\_\_?\_\_ th term of –3, 1, 5, 9, … 6) Find sum of  to 15 terms

11) Find the total number of different twelve-letter arrangements that can be formed using the letters in the word PENNSYLVANIA.

Don’t Forget that formulas for combination and permutation problems on website in documents tab, or look at answer key document in sol tab.

12) A four-digit serial number is to be created from the digits 0 through 9. How many of these serial numbers can be created if 0 can not be the first digit, no digit may be repeated, and the last digit must be 5?

Variation

**Direct:  Inverse:  Joint: **

16) In building a brick wall, the amount of time it takes to complete the wall varies directly with the number of bricks in the wall and varies inversely with the number of bricklayers that are working together.  A wall containing 1200 bricks, using 3 bricklayers, takes 18 hours to build. How long would it take to build a wall of 4500 bricks if 5 bricklayers worked on it?

17) A ball is dropped from a window of a building.  The distance it falls varies directly with the square of the time it falls.  If a ball can fall 8 feet in 0.5 seconds, how far will it fall if it takes 2.5 seconds for it to hit the ground?

Composition of Functions

18) If  and , then find .

