Background: The function $f(x)$ is calculated by using the following infinite series

$$f(x) = \frac{x^2}{17} + \frac{x^3}{3} + \frac{x^4}{3} + \frac{x^5}{3} + \ldots$$

Specifications:

1. Write the pseudo-code for the function.
2. Write the MATLAB function for calculating $f(x)$. Use $n$ terms to calculate $f(x)$ at a given value of $x$.
   ```matlab
   function fn=my_fun(x, n)
   Use the for-end loop.
   end
   
   3. Test it out for four different cases of input variables ($x=0.25, n=4$;
      $x=0.25, n=61$; $x=3.0, n=1$; $x=3.0, n=2$) of the function. Testing a procedure
does not mean just finding whether the procedure gives you a number but in
some of the four cases, that it also is the correct number.

4. What you need to submit
   (A) Name, Section Number and Pseudo code on a separate page
   (B) Mfile of the function my_fun on a separate page (See website HW sample
       for format)
   (C) Mfile where you are using the function my_fun printing the inputs and
       outputs (See website HW sample for format)
   (D) Separate Command Window output for each test. Each command window
       output should only have your name, section number, values of $n$ and $x$, and
       value of the function. Use fprintf and disp
   (E) Put comments in the two Mfiles as given in the sample HW.

BONUS for 20 points: Using your calculus knowledge, can you find the exact
expression for the series, given $|x|<1$. Attach this as a handwritten document with
your name on it.