Finding Numbers in a Haystack

In this assignment you will read through and parse a file with text and numbers. You will extract all the numbers in the file and compute the sum of the numbers.

Data Files
We provide two files for this assignment. One is a sample file where we give you the sum for your testing and the other is the actual data you need to process for the assignment.

Data Format
The file contains much of the text from the introduction of the textbook except that random numbers are inserted throughout the text. Here is a sample of the output you might see:

```
Why should you learn to write programs? 7746
12 1929 8827
Writing programs (or programming) is a very creative
7 and rewarding activity.  You can write programs for
many reasons, ranging from making your living to solving
8837 a difficult data analysis problem to having fun to helping 128
someone else solve a problem.  This book assumes that
everyone needs to know how to program ...
```

The sum for the sample text above is 27486. The numbers can appear anywhere in the line. There can be any number of numbers in each line (including none).

Handling The Data
The basic outline of this problem is to read the file, look for integers using the re.findall(), looking for a regular expression of '[0-9]+' and then converting the extracted strings to integers and summing up the integers.