Problem 3: Blissfully Blackbeard

To assist people in choosing appropriate phraseology with which to celebrate International Talk Like a Pirate Day, the IBF (International Buccaneer Foundation) has proposed the Potential Pirate Index (PPI), which is the number of words in an utterance containing the letter-sequence "ar" over the total number of words in an utterance times 100. For example, PPI("Arrr!") = $1/1 \times 100 = 100.0$, PPI("Thar be artichokes!") = $2/3 \times 100 = 66.6$, and PPI("I left my heart in Akron.") = $1/6 \times 100 = 16.6$. Note that occurrences of "ar" are case-insensitive.

Write a program which, given a textfile of $n \ge 1$ utterances (one per line), outputs the PPI of each utterance. Your input will be an *n*-line textfile in which each line is an utterance. You may assume that all input files are formatted correctly.

Sample input #1 (available as file "test3a.dat"):

Thar be artichokes! Bark! Bark! Excuse me, have ye any Gucci handbags? Art Deco designs are far better than Art Noveau. Arrrr! Avast! Thar be Martians in Asiolomar!

Sample output #1:

PPI("Thar be artichokes!") = 66.67
PPI("Bark! Bark!") = 100.00
PPI("Excuse me, have ye any Gucci handbags?") = 0.00
PPI("Art Deco designs are far better than Art Noveau.") = 44.44
PPI("Arrrr!") = 100.00
PPI("Avast! Thar be Martians in Asiolomar!") = 50.00