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CSE 3521

Homework #10

1.

    a. [space], [the], [final], [frontier], [these], [are], [the], [voyages], [of], [the], [starship], [enterprise], [its], [five], [year], [mission], [to], [explore], [strange], [new], [worlds], [to], [seek], [out], [new], [life], [and], [new], [civilizations], [to], [boldly], [go], [where], [no], [man], [has], [gone], and [before]

        i. space: 1

       ii. the: 3

     iii. final: 1

     iv. frontier: 1

      v. these: 1

     vi. are: 1

    vii. voyages: 1

   viii. of: 1

     ix. starship: 1

      x. enterprise: 1

     xi. its: 1

    xii. five: 1

   xiii. year: 1

   xiv. mission: 1

    xv. to: 3

   xvi. explore: 1

  xvii. strange: 1

 xviii. new: 3

   xix. worlds: 1

   xx. seek: 1

  xxi. out: 1

  xxii. life: 1

xxiii. and: 1

xxiv. civilizations: 1

xxv. boldly: 1

xxvi. go: 1

xxvii. where: 1

xxviii. no: 1

xxix. man: 1

xxx. has: 1

xxxi. gone: 1

xxxii. before: 1

b. [space the], [the final], [final frontier], [frontier these], [these are], [are the], [the voyages], [voyages of], [of the], [the starship], [starship enterprise], [enterprise its], [its five], [five year], [year mission], [mission to], [to explore], [explore strange], [strange new], [new worlds], [worlds to], [to seek], [seek out], [out new], [new life], [life and], [and new], [new civilizations], [civilizations to], [to boldly], [boldly go], [go where], [where no], [no man], [man has], [has gone], and [gone before]

i. space, the: 1

ii. the, final: 1

iii. final, frontier: 1

iv. frontier, these: 1

v. these, are: 1

vi. are, the: 1

vii. the, voyages: 1

viii. voyages, of: 1

ix. of, the: 1

x. the, starship: 1

xi. starship, enterprise: 1

xii. enterprise, its: 1

xiii. its, five: 1

xiv. five, year: 1

xv. year, mission: 1

xvi. mission, to: 1

xvii. to, explore: 1

xviii. explore, strange: 1

xix. strange, new: 1

xx. new, worlds: 1

xxi. worlds, to: 1

xxii. to, seek: 1

xxiii. seek, out: 1

xxiv. out, new: 1

xxv. new, life: 1

xxvi. life, and: 1

xxvii. and, new: 1

xxviii. new, civilizations: 1

xxix. civilizations, to: 1

xxx. to, boldly: 1

xxxi. boldly, go: 1

xxxii. go, where: 1

xxxiii. where, no: 1

xxxiv. no, man: 1

xxxv. man, has: 1

xxxvi. has, gone: 1

xxxvii. gone, before: 1

2.

  a. space: 2.63157895%

  b. the: 7.89473684%

  c. final: 2.63157895%

  d. frontier: 2.63157895%

  e. these: 2.63157895%

  f. are: 2.63157895%

  g. voyages: 2.63157895%

h. of: 2.63157895%

i. starship: 2.63157895%

j. enterprise: 2.63157895%

k. its: 2.63157895%

l. five: 2.63157895%

m. year: 2.63157895%

n. mission: 2.63157895%

o. to: 7.89473684%

p. explore: 2.63157895%

q. strange: 2.63157895%

r. new: 7.89473684%

s. worlds: 2.63157895%

t. seek: 2.63157895%

u. out: 2.63157895%

v. life: 2.63157895%

w. and: 2.63157895%

x. civilizations: 2.63157895%

y. boldly: 2.63157895%

z. go: 2.63157895%

aa. where: 2.63157895%

bb. no: 2.63157895%

cc. man: 2.63157895%

dd. has: 2.63157895%

ee. gone: 2.63157895%

ff. before: 2.63157895%

3.

a. these: 2.63157895%

b. are: 2.63157895%

c. voyages: 2.63157895%

d. to: 7.89473684%

e. new: 7.89473684%

      f. worlds: 2.63157895%

      g. go: 2.63157895%

          i. $(1/38)^5*(3/38)^3=6.21005*10^{-12}$

4.

      a. Wood Napkin Box

          i. im0: {(567, 1342), (1473, 576), X, (1443, 1423)}

         ii. im1: {(381, 552), (1228, 577), X, X}

      b. Elec. Stuff Box, Folder at Front

          i. im0: {(638, 548), (1169, 1340), (587, 1670), (1212, 1646)}

         ii. im1: {(244, 1353), (865, 1343), (246, 1668), (895, 1650)}

5.

      a. 4412.147*144.174/(638 - 244)=1614.51

      b. 4412.147*144.174/(1169 - 865)=2092.49

      c. 4412.147*144.174/(587 - 246)=1865.45

      d. 4412.147*144.174/(1212 - 895)=2006.68