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1. Presently, 1.84% of Americans have Alzheimer's disease. Here is the distribution of those with Alzheimer's.

This is P(Age | Alz) and we were given that P(Alz) = 0.0184:

	Below 65	65 to 74	75 to 84	Above 85
P(Age | Alz)	0.03	0.16	0.44	0.37

The goal of this exercise is to find what fraction each of these groups has Alzhemier's. Here is the age distribution of the United States.

This is P(Age):

Below 65	65 to 74	75 to 84	Above 85
0.870	0.070	0.042	0.018

a. Finish the two-way table showing age group and Alzheimer's status for a population of 1,000 Americans. For this two-way table it's okay to have fractional people.

	Below 65	65 to 74	75 to 84	Above 85	T
Alz	0.552	2.944	8.096	6.808	18.4
Alz^c	869.448	67.056	33.904	11.192	981.6
T	870	70	42	18	1000

b. Show how to find the prevalence of Alzheimer's, that is, the proportion of each population that has Alzhemer's using the two way table:

P(Alz | Below 65) = (0.552)/(870) = 0.000634483

P(Alz | 65 to 74) = (2.944)/(70) = 0.04205

P(Alz | 75 to 84) = (8.096)/(42) = 0.1927

P(Alz | Above 85) = (6.808)/(18) = 0.37822