

Name _____

Child's Chances Activity 1 Optional HW (10 points for correct explained answers) Due @ 8:10 AM Thursday)

1.5 In 2009, approximately 2,041,000 fires were reported in the United States. The table below shows how these fires were distributed by type.

Type of Fire	Number Reported
Structure—accidental	542,000
Structure—incendiary device used	62,000
Structure—suspicious origin	36,000
Outside of structure (includes timber, crops, and outside storage)	54,000
Brush and rubbish	806,000
Vehicle	428,000
Other	113,000

Source: U.S. Bureau of the Census.

- What is the probability that a fire reported in 2009 was a structure fire?
- What percentage of all reported fires in 2009 involved incendiary devices or suspicious causes?
- What is the probability that a fire reported in 2009 was not a vehicle fire? What mathematical idea is this representing?

1.6 In the United States, heart disease is the most common cause of death for adults. The table below shows the number of deaths due to heart disease for men of various age groups in 2000.

Age (years)	No. in Age Group	No. of Deaths
25-34	21,564,000	3278
35-44	18,009,000	18,585
45-54	12,232,000	46,078
55-64	9,955,000	948,276
65-74	7,907,000	1,716,056
75-84	3,745,000	169,828
over 85	841,000	70,864

Source: U.S. Bureau of the Census.

- For men aged between 45 and 54 in 2000, what was the probability of dying from heart disease?
- What percentage of the men who died from heart disease in 2000 were between 65 and 74 years old?
- For men aged 25 and over in 2000, what was the probability of dying from heart disease?
- For men aged between 25 and 34 in 2000, what was the probability of not dying from heart disease?