

Felipe surveyed students at his school. He found that 78 students own a cell phone and 57 of those students own an MP3 player. There are 13 students that do not own a cell phone, but own an MP3 player. Nine students do not own either device. Construct a two-way table summarizing the data and answer the questions

	MP3 Player	No MP3 Player	Total
Cell Phone	57	21	78
No Cell Phone	13	9	22
Total	70	30	100

- What is the probability of a randomly selected student with a cell phone to have MP3 player too?

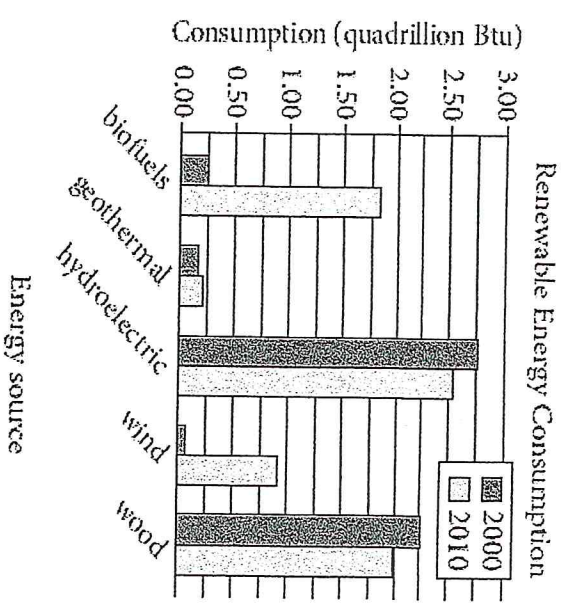
$$\frac{57}{78} = \frac{19}{26}$$

- What is the probability of a randomly selected student to have no cell phone?

$$\frac{22}{100} = \frac{11}{50}$$

- Given that a student has no MP3 player, what is the probability that he does not have a cell phone too?

$$\frac{9}{30} = \frac{3}{10}$$



The bar graph above shows renewable energy consumption in quadrillions of British thermal units (Btu) in the United States, by energy source, for several energy sources in the years 2000 and 2010.

In a scatterplot of this data, where renewable energy consumption in the year 2000 is plotted along the x-axis and renewable energy consumption in the year 2010 is plotted along the y-axis for each of the given energy sources, how many data points would be above the line  $y = x$ ?

- 1
- 2
- 3
- 4

A) 1	(2000, 2010)	(900, 900)
B) 2	(.25, 1.75)	(.25, .25) 400
C) 3	(.2, .4)	(.2, .2) 110
D) 4	(2.75, 2.5)	(2.75, 2.75) 110
	(1, .8)	(1, .1) 400
	(2.25, 2)	(2.25, 2.25) 110