

13.

EXAMPLE 2 – Conditional Probability in Statistics
 A student compiled the following table comparing the amounts of land area and water area, in square miles, in various U.S. states. What is the probability that a point chosen at random on a map is water, given the map is Florida?

	Land
Alaska	571,936
Florida	54,018
Texas	262,100
California	156,002

$$\frac{11,777}{65,795}$$

$$18\%$$

14. What is $P(\text{plastic}|\text{recycled waste})$?

$$\frac{2.1}{79.4}$$

$$2.6\%$$

Municipal Waste
(million)

Material	Recycled
Paper	45.
Metal	7.
Glass	3.
Plastic	2.
Other	21.

Source: U.S. Environmental Protection Agency

15.

EXAMPLE 3 – Using the Conditional Probability Form
 The table shows the number of male and female customers at a café on a certain day. Each customer drank either a soda or an iced tea. What is the probability that the customer drank a soda, given that the customer was a male?

	Soda	Iced Tea
Male	21	29
Female	28	32

$$\frac{21}{50}$$

$$42\%$$