

Grandma Addam's Birthday Party! **KEY**

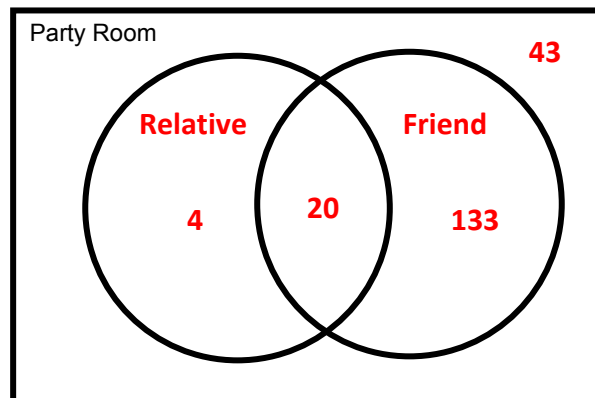


You've been invited to Grandma Addam's birthday party at the haunted mansion! All your crazy relatives and friends will be there. When you arrive, this is what you discover:

- 200 people are at the party
- 24 are relatives
- 43 are neither a friend or a relative
- 20 are both a friend and a relative

How many of your friends came to the party?

Note: a friend is anyone you've met. You are that kind of guy or gal.



Once you've completed the Venn diagram, create a two-way table that displays the same data.

	Relative	Not Relative	Totals
Friend	20	133	153
Not Friend	4	43	47
Totals	24	176	200

What information is more obvious from the Venn diagram? *Overall relationships (Venn diagrams are simpler and easier to read)*

What information is more obvious from the two-way table? *Marginal totals, the "not" categories*

What is the probability that a randomly selected individual is a friend or a relative, that is:

$P(\text{Friend or Relative}) = 157/200 = .785$