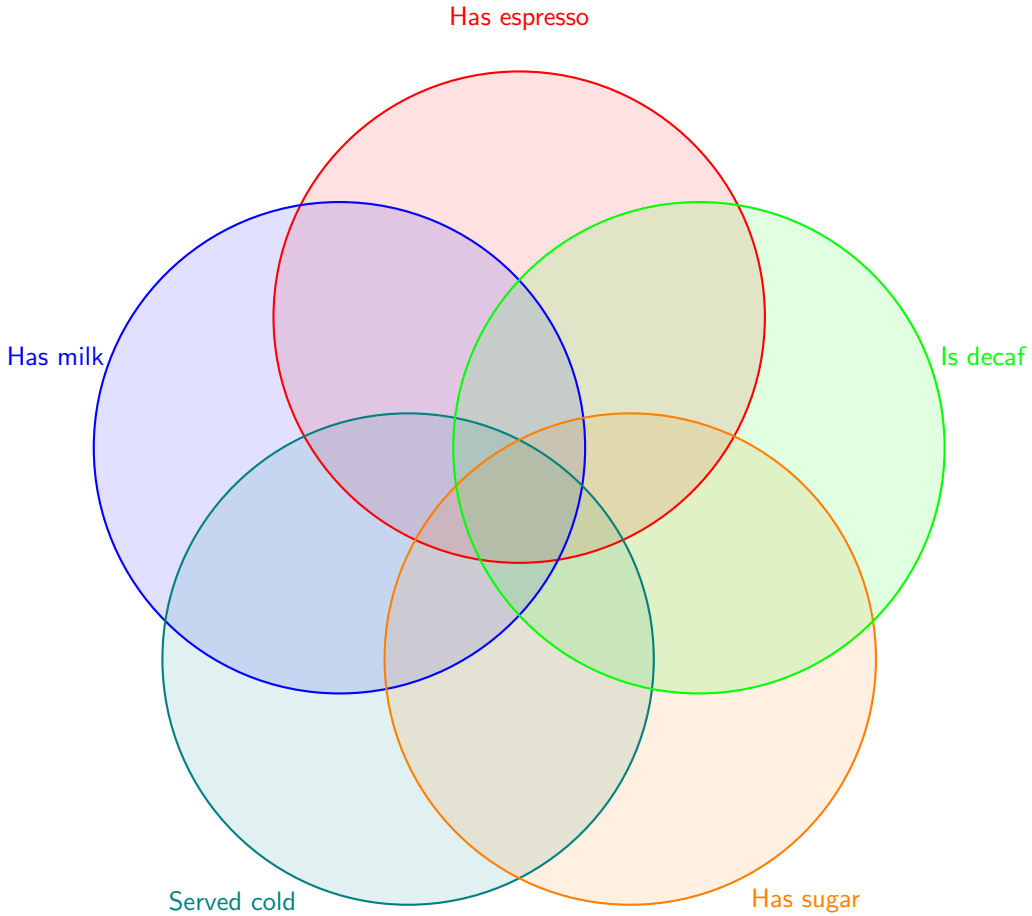


The figure shows every region five circles can produce: 21 inside (22 counting the outside). A five-set Venn diagram has 31 non-empty regions, so it cannot be drawn with circles alone.