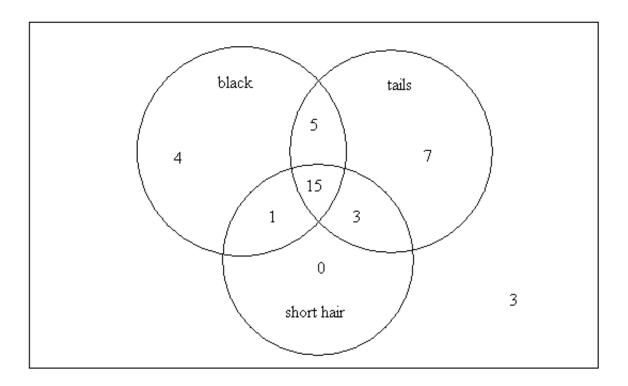
Math 2283 - Introduction to Logic

Quiz #10 - 2006.10.18 Solutions

The Durant Animal Control has 38 cats at its facility. Of the 38, 30 of them have tails, 19 have short hair and 25 are black. There are 15 cats which are short haired, black and have tails. Furthermore, all but one of the short haired cats has a tail. There are 20 cats total which have tails and are black. There is only one black haired cat with no tail and short hair.

1. Create a Venn Diagram with three sets, using the categories listed above (cats that are black, cats with tails and cats with short hair).



2. What is the maximum possible number of tailless, brown, long haired cats hanging out at the facility right now?

There are 3 possible cats that would satisfy this combination of attributes.