

```
//1. List all people. (200)

db.people.find()

//2. Count all people. (200)
db.people.count()

//3. List all people in Arizona. (6)
db.people.find({state: "Arizona"}).count()

//4. List all males in Arizona. (2)
db.people.find({state: "Arizona", gender: "Male"})
//5. List all people in Arizona plus New Mexico.
db.people.find({ $or: [
  { state: "Arizona" },
  { state : "New Mexico" }
]})

//6. List all people under age 40. (90)
db.people.find({age: {$lt: 40}}).count()

//7. List all females in Florida between the ages of 40 and 45 (inclusive). (4)
db.people.find({ $and: [
  { state: "Florida" },
  { gender: "Female" },
  { age : {$gte: 40}},
  { age : {$lte: 45}}
]}).count()

//8. List people whose first name starts with "H". (2)

db.people.find({first_name: /^H/}).count()

//9. List all people in Michigan, sorted by first name. (6)
db.people.find({state: "Michigan"}).sort({first_name: 1}).count()

//10. List all people who live in Virginia or are named Virginia.
db.people.find({ $or: [
  {first_name: "Virginia"},
  {state: "Virginia"}
]}).count()

//11. List the names of people under age 30. Only display their first and last
name. (38)
db.people.find({age: {$lt: 30}}, {first_name:true, last_name:true}).count()
```

```
//12. List all people in Montana. Display all information except age. (2)
db.people.find({state: "Montana"}, {age: false}).count()

//13. List the email addresses of people with a ".edu" email. Only display the
email. (12)
db.people.find({email: /\.edu$/}, {email:true}).count()

//14. Count all people with at least one child under age four. (69)
db.people.find({"children.age": {$lt: 4}}).count()

//15. List people who have no children. (43)
db.people.find({children:[]}).count()

//16. List people who have at least one child. (157)
//db.people.find({children:{$size: 1}})

db.people.find({children:{$gte:{$size:1}}}).count()
```