class 17

Lena (A16420052)

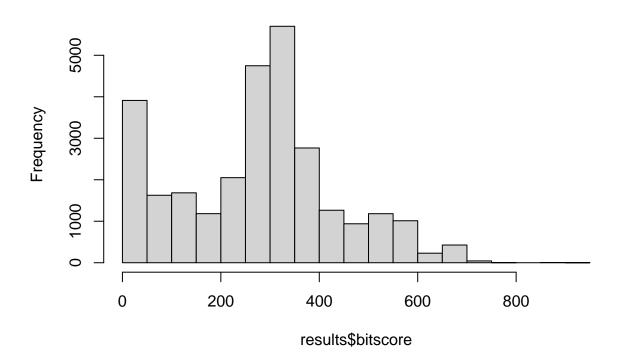
2023-11-28

```
col_names<- c("qseqid", "sseqid", "pident", "length", "mismatch", "gapopen", "qstart", "qend", "sstart"
results<-read.delim("results.tsv", col.names = col_names)</pre>
```

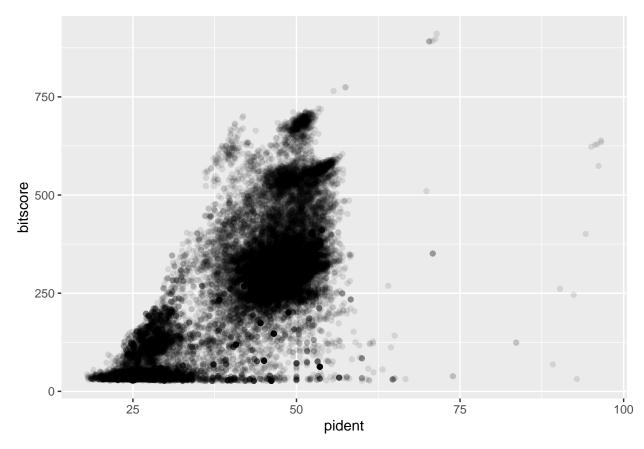
Make a histogram of the \$bitscore values. You may want to set the optional breaks to be a larger number (e.g. breaks=30).

hist(results\$bitscore, breaks=30)

Histogram of results\$bitscore



```
library(ggplot2)
ggplot(results, aes(pident, bitscore)) + geom_point(alpha=0.1)
```



```
ggplot(results, aes((results$pident * (results$qend - results$qstart)), bitscore)) + geom_point(alpha=0
## Warning: Use of `results$pident` is discouraged.
## i Use `pident` instead.
## Warning: Use of `results$qend` is discouraged.
## i Use `qend` instead.
## Warning: Use of `results$qstart` is discouraged.
## i Use `qstart` instead.
## Warning: Use of `results$pident` is discouraged.
## i Use `pident` instead.
## Warning: Use of `results$qend` is discouraged.
## i Use `qend` instead.
## Warning: Use of `results$qend` is discouraged.
## i Use `qend` instead.
## Warning: Use of `results$qstart` is discouraged.
## i Use `qend` instead.
```

`geom_smooth()` using method = 'gam' and formula = 'y ~ s(x, bs = "cs")'

