tapply

`aggregate(africa$pop_2017, list(africa$region), mean)`

```
  Group.1        x
1 central 17915179
2    east 23673746
3   north 38598350
4   south 12770885
5    west 23284215
```

`tapply(africa$pop_2017, africa$region, mean)`

```
 central     east    north    south     west
17915179 23673746 38598350 12770885 23284215
```

tapply

```
aggregate(safi$rooms,
        list(safi$village, safi$respondent_wall_type),
        mean, na.rm=TRUE)


tapply(safi$rooms,
       list(safi$village, safi$respondent_wall_type),
       mean, na.rm=TRUE)
```

	burntbricks	cement	muddaub	sunbricks
Chirodzo	2.590909	NA	1.187500	1.000000
God	1.684211	NA	1.266667	1.666667
Ruaca	2.000000	3	1.333333	1.428571