

Prac 3.24

[M/M129]

Data on the distribution of economic variables, such as income, is often presented in quintiles: divisions of the group into five equal-sized parts.

Here is a table from the US Census Bureau (Historical Income Tables from March 21, 2002) giving the distribution of income across US households in year 2000.

Quintile	Upper Boundary	Mean Value
Lowest	\$17,955	\$10,190
Second	\$33,006	\$25,334
Third	\$52,272	\$42,361
Fourth	\$81,960	\$65,729
Fifth	—	\$141,260

Based on this table, calculate:

1. The 20th percentile of family income.

10190 17955 33006 25334 52272 42361 81960 141260 Prac 3.24-1

2. The 80th percentile of family income.

10190 17955 33006 25334 52272 42361 81960 141260 Prac 3.24-2

3. The table doesn't specify the median family income but you can make a reasonable estimate of it. Pick the closest one.

10000 18000 25500 42500 53000 65700 Prac 3.24-3

4. Note that there is no upper boundary reported for the fifth quintile, and no lower boundary reported for the first quintile. Why? Prac 3.24-4

5. From this table, what evidence is there that family income has a skew rather than "normal" distribution? Prac 3.24-5