

The first set of data consists of 63 different brands of drink, each measured on two variables: alcohol content (%) & price (\$)/10oz.

The first histogram shows the relative frequency of levels of alcohol (subdivided into intervals of .15%).

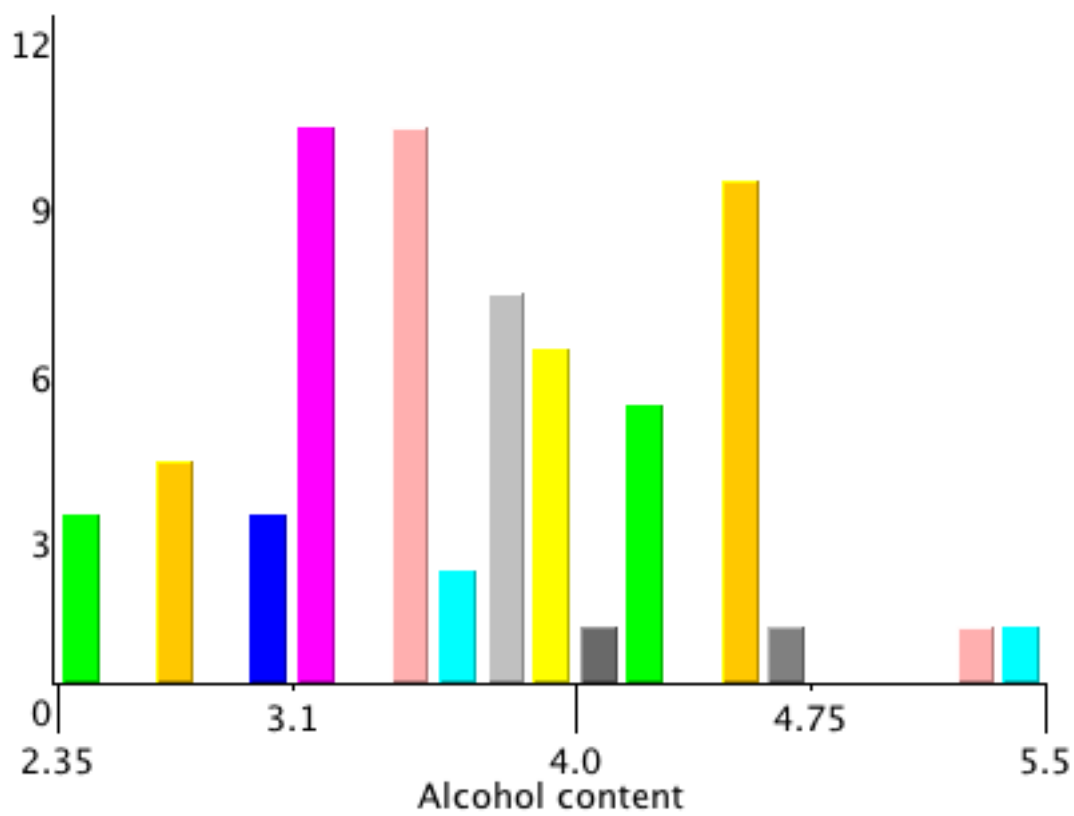
The second histogram shows the relative frequency of levels of price (subdivided into intervals of 6 cents).

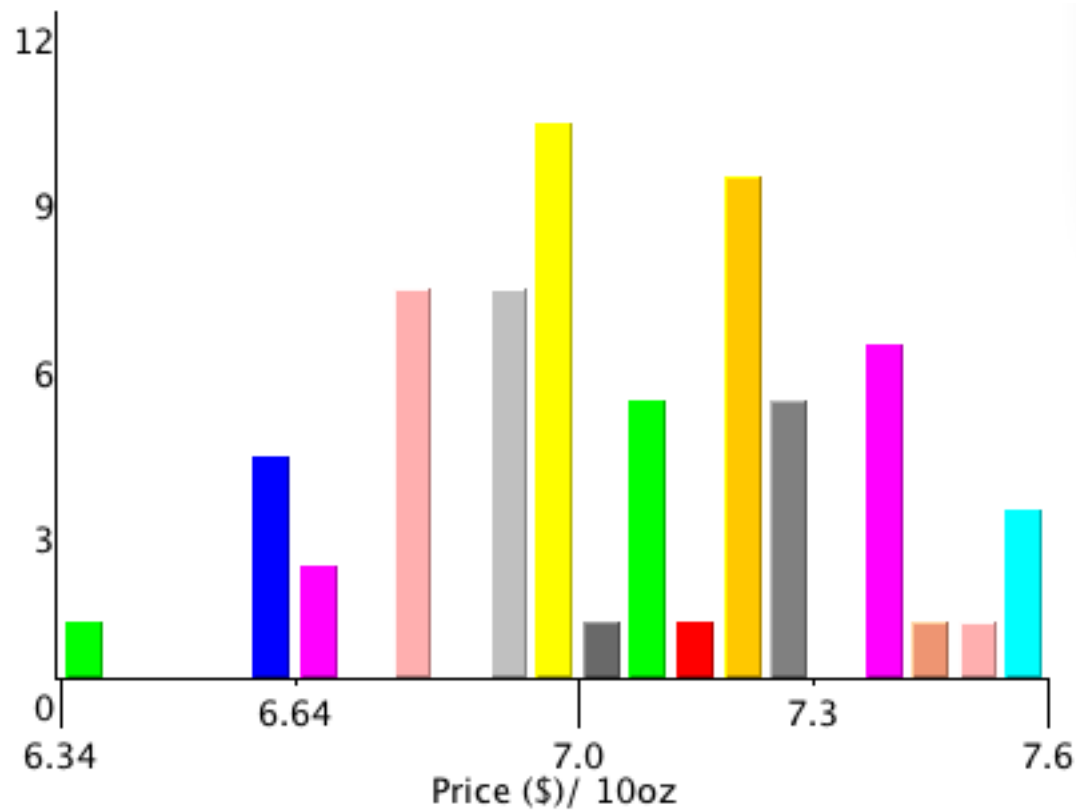
Each brand of drink is a point on the scatter plot that shows price versus alcohol content.\*  
Do you see any pattern in these points?

\* By convention, when we say the scatter plot shows variable A *versus* variable B, we mean that, for the points (in this case, the brands of drink), the vertical height of each point is the value for variable A and the horizontal distance of the point is the value for variable B.

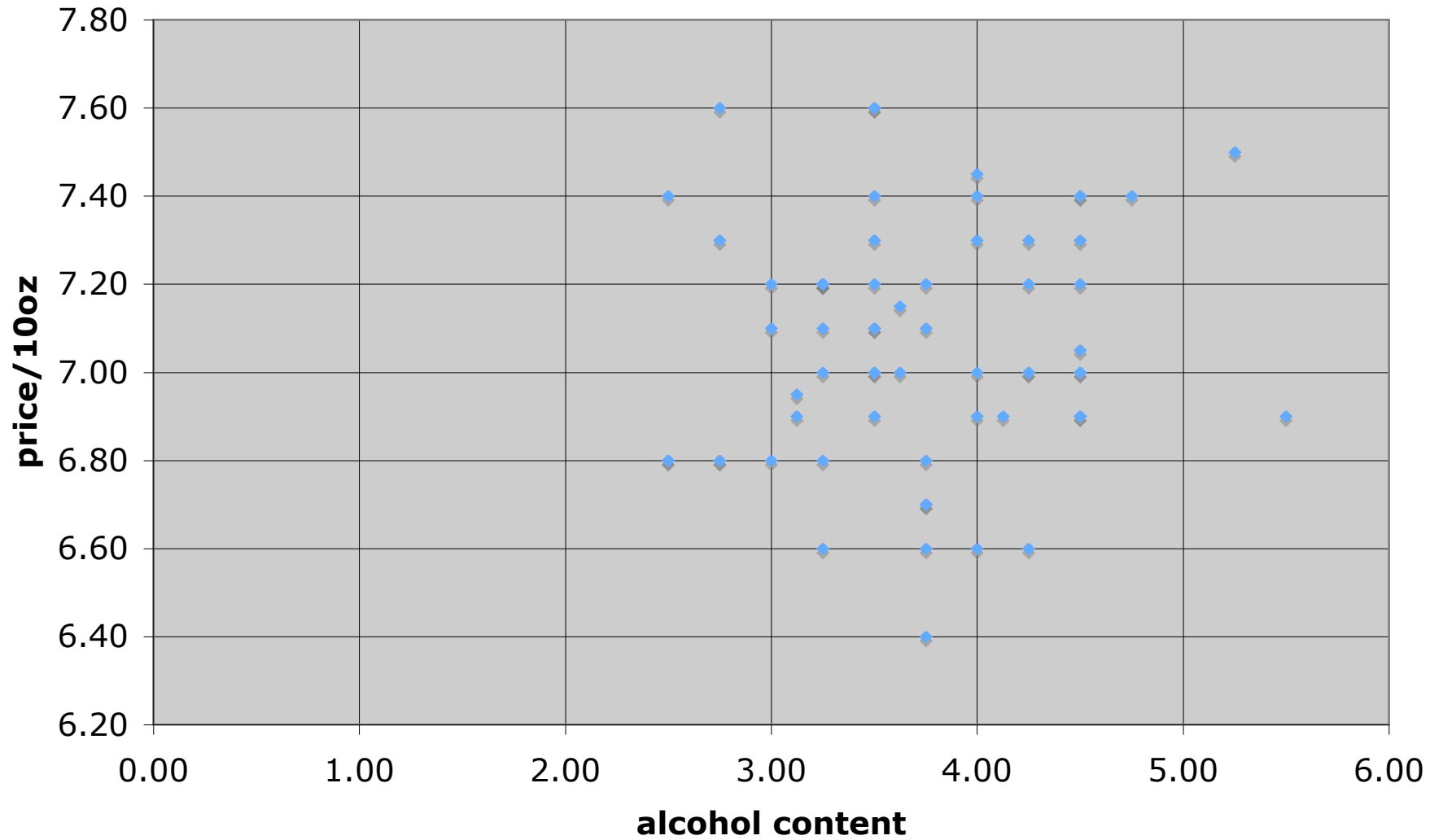
| <b>brand of<br/>drink</b> | <b>alcohol<br/>content</b> | <b>price/<br/>10oz</b> |
|---------------------------|----------------------------|------------------------|
| a                         | 3.50                       | 7.60                   |
| b                         | 3.25                       | 6.60                   |
| c                         | 3.75                       | 6.40                   |
| d                         | 4.75                       | 7.40                   |
| e                         | 3.63                       | 7.00                   |
| f                         | 4.50                       | 7.00                   |
| g                         | 2.50                       | 6.80                   |
| h                         | 4.25                       | 7.20                   |
| I                         | 3.75                       | 7.20                   |
| j                         | 4.25                       | 7.30                   |
| k                         | 2.50                       | 7.40                   |
| l                         | 3.75                       | 6.80                   |
| m                         | 3.75                       | 6.70                   |
| n                         | 3.50                       | 7.40                   |
| o                         | 3.00                       | 6.80                   |
| p                         | 2.75                       | 7.30                   |
| q                         | 3.75                       | 6.70                   |
| r                         | 3.25                       | 7.20                   |
| s                         | 4.00                       | 7.40                   |
| t                         | 3.63                       | 7.15                   |
| u                         | 3.13                       | 6.95                   |
| v                         | 4.13                       | 6.90                   |
| w                         | 3.25                       | 7.10                   |
| x                         | 3.50                       | 7.30                   |
| y                         | 3.25                       | 6.80                   |
| z                         | 3.75                       | 7.10                   |
| aa                        | 4.00                       | 6.90                   |
| bb                        | 5.25                       | 7.50                   |
| cc                        | 3.50                       | 7.60                   |
| dd                        | 3.50                       | 6.90                   |
| ee                        | 3.25                       | 7.20                   |
| ff                        | 2.75                       | 6.80                   |
| gg                        | 4.00                       | 7.45                   |
| hh                        | 3.50                       | 7.00                   |
| ii                        | 3.25                       | 7.20                   |
| jj                        | 3.50                       | 7.00                   |
| kk                        | 3.50                       | 7.20                   |
| ll                        | 4.25                       | 6.60                   |
| mm                        | 3.13                       | 6.90                   |
| nn                        | 3.25                       | 7.20                   |
| oo                        | 4.50                       | 7.00                   |
| pp                        | 4.50                       | 6.90                   |
| qq                        | 5.50                       | 6.90                   |
| rr                        | 3.00                       | 7.10                   |
| ss                        | 4.50                       | 7.40                   |
| tt                        | 2.75                       | 7.60                   |
| uu                        | 4.50                       | 7.05                   |

|     |      |      |
|-----|------|------|
| vv  | 4.00 | 6.60 |
| ww  | 4.25 | 7.00 |
| xx  | 4.50 | 7.30 |
| yy  | 4.25 | 7.00 |
| zz  | 4.00 | 7.30 |
| aaa | 3.50 | 7.10 |
| bbb | 4.50 | 6.90 |
| ccc | 4.00 | 7.00 |
| ddd | 4.50 | 7.40 |
| eee | 2.75 | 6.80 |
| fff | 3.50 | 7.10 |
| ggg | 2.50 | 6.80 |
| hhh | 3.25 | 7.00 |
| iii | 3.00 | 7.20 |
| jjj | 3.75 | 6.60 |
| kkk | 4.50 | 7.20 |





## Brands of drink (price vs. alcohol)



The second set of data consists of 63 different families, each measured on two variables: mother's height (inches) & father's height (inches).

The first histogram shows the relative frequency of levels of mother's height (subdivided into intervals of .6 inches).

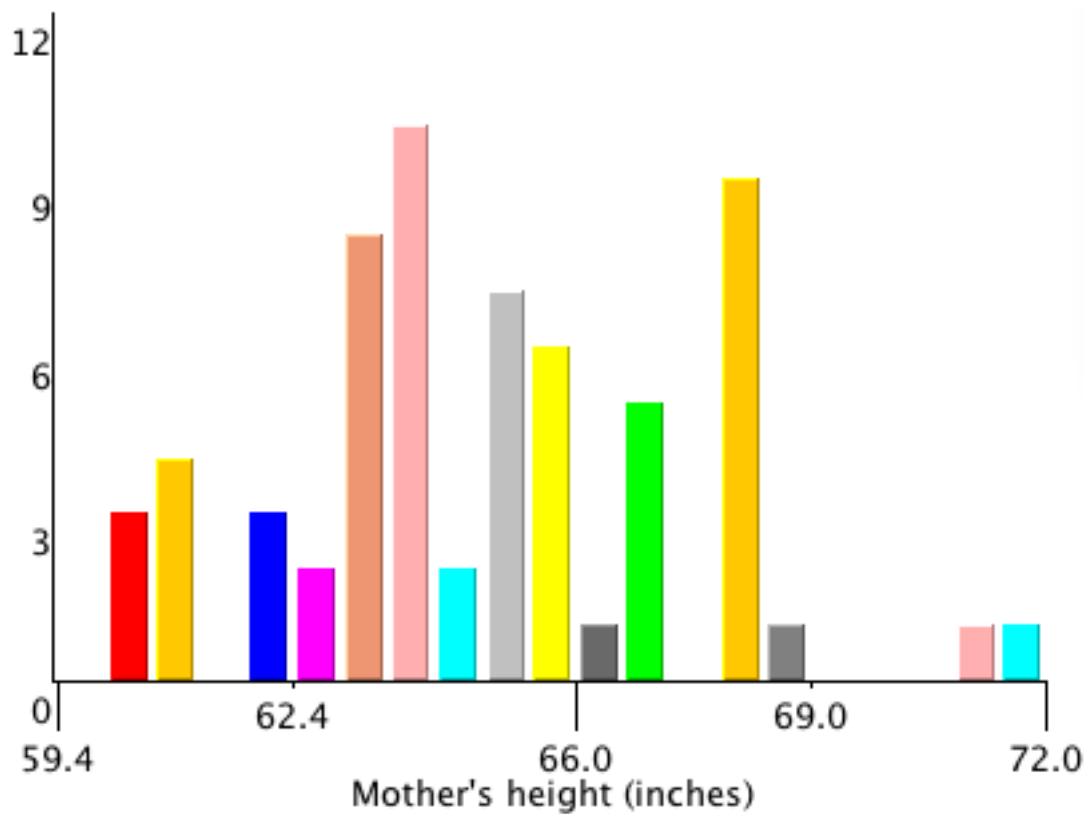
The second histogram shows the relative frequency of levels of father's height (subdivided into intervals of .6 inches).

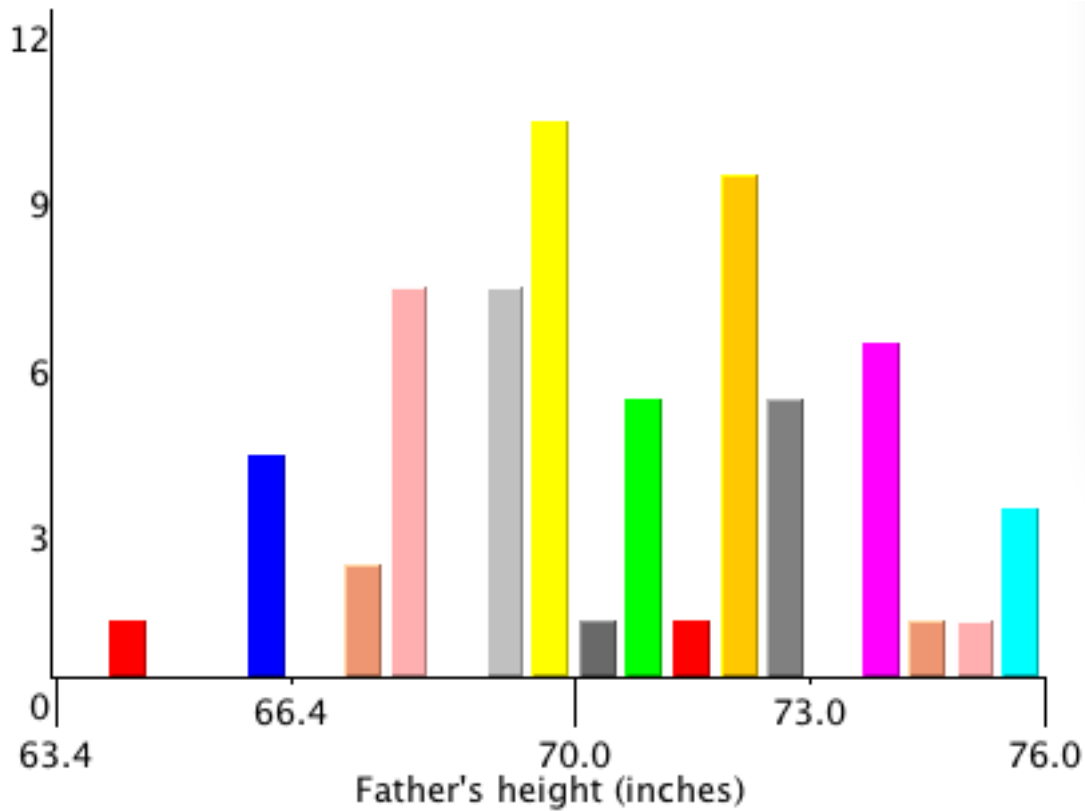
Each family is a point on the scatter plot that shows father's height *versus* mother's height. Do you see any pattern in these points?

| <b>Family</b> | <b>mother's<br/>height<br/>(inches)</b> | <b>father's<br/>height<br/>(inches)</b> |
|---------------|---|---|
| a             | 64                                      | 76                                      |
| b             | 63                                      | 66                                      |
| c             | 65                                      | 64                                      |
| d             | 69                                      | 74                                      |
| e             | 64.5                                    | 70                                      |
| f             | 68                                      | 70                                      |
| g             | 60                                      | 68                                      |
| h             | 67                                      | 72                                      |
| I             | 65                                      | 72                                      |
| j             | 67                                      | 73                                      |
| k             | 60                                      | 74                                      |
| l             | 65                                      | 68                                      |
| m             | 65                                      | 67                                      |
| n             | 64                                      | 74                                      |
| o             | 62                                      | 68                                      |
| p             | 61                                      | 73                                      |
| q             | 65                                      | 67                                      |
| r             | 63                                      | 72                                      |
| s             | 66                                      | 74                                      |
| t             | 64.5                                    | 71.5                                    |
| u             | 62.5                                    | 69.5                                    |
| v             | 66.5                                    | 69                                      |
| w             | 63                                      | 71                                      |
| x             | 64                                      | 73                                      |
| y             | 63                                      | 68                                      |
| z             | 65                                      | 71                                      |
| aa            | 66                                      | 69                                      |
| bb            | 71                                      | 75                                      |
| cc            | 64                                      | 76                                      |
| dd            | 64                                      | 69                                      |
| ee            | 63                                      | 72                                      |
| ff            | 61                                      | 68                                      |
| gg            | 66                                      | 74.5                                    |
| hh            | 64                                      | 70                                      |
| ii            | 63                                      | 72                                      |
| jj            | 64                                      | 70                                      |
| kk            | 64                                      | 72                                      |
| ll            | 67                                      | 66                                      |
| mm            | 62.5                                    | 69                                      |
| nn            | 63                                      | 72                                      |
| oo            | 68                                      | 70                                      |
| pp            | 68                                      | 69                                      |
| qq            | 72                                      | 69                                      |
| rr            | 62                                      | 71                                      |
| ss            | 68                                      | 74                                      |
| tt            | 61                                      | 76                                      |



|     |    |      |
|-----|----|------|
| uu  | 68 | 70.5 |
| vv  | 66 | 66   |
| ww  | 67 | 70   |
| xx  | 68 | 73   |
| yy  | 67 | 70   |
| zz  | 66 | 73   |
| aaa | 64 | 71   |
| bbb | 68 | 69   |
| ccc | 66 | 70   |
| ddd | 68 | 74   |
| eee | 61 | 68   |
| fff | 64 | 71   |
| ggg | 60 | 68   |
| hhh | 63 | 70   |
| iii | 62 | 72   |
| jjj | 65 | 66   |
| kkk | 68 | 72   |





## Families (father's vs. mother's heights)

