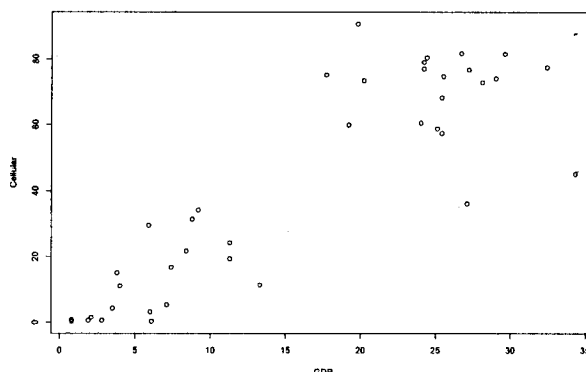


1. Use the data from page 1 on percent of population in a country that uses cell phones called "cellular" to see its association to GDP (in thousands of \$ per capita).



- (a) Describe the scatterplot in terms of (i) form, strength and direction of association and (ii) identifying two nations that have less cell-phone use than you would expect, given their GDP.

(i) - 2 clusters in bottom left + and top right
 - If we draw a straight line through the points, the points do not lie very close to the line so the association is not very strong
 - positive association
 (ii) 2 possible outliers with ^{approx.} points (27, 40) + (35, 47) have low cell phone use for high GDP

- (b) Give the approximate x and y coordinates for the nation that has the (i) highest cell-phone use and (ii) highest GDP.

(i) highest cell-phone use $\approx 98\%$ $\rightarrow (20, 98)$
 (ii) highest GDP $\approx 35 \rightarrow (35, 47)$

- (c) Suppose you only considered the correlation for those nations having GDP above 15. Would the correlation be stronger or weaker than for all 39 nations.

The association/correlation would be weaker for nations above \$5,000 GDP/capita than for use of the data because the points are more scattered, not tightly clustered.