Guess Two-Thirds of the Average
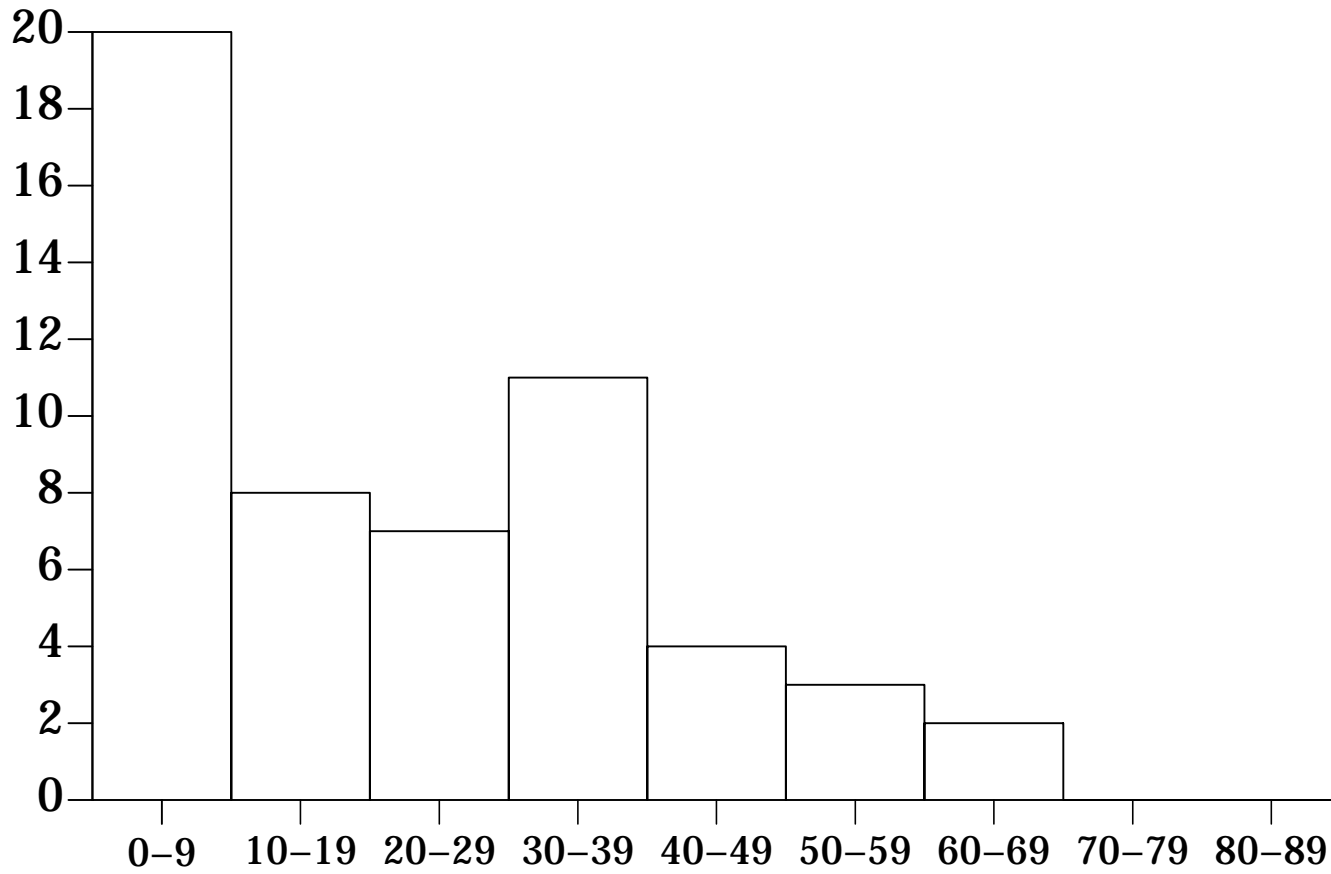
- Choose a number between 0 and 100.
- A prize of $5 will be split equally between all students whose number is closest to $\frac{2}{3}$ of the average of the numbers chosen (the mean number).
- What should you choose?
- Write down your answer.
- What is the equilibrium choice?

Results:

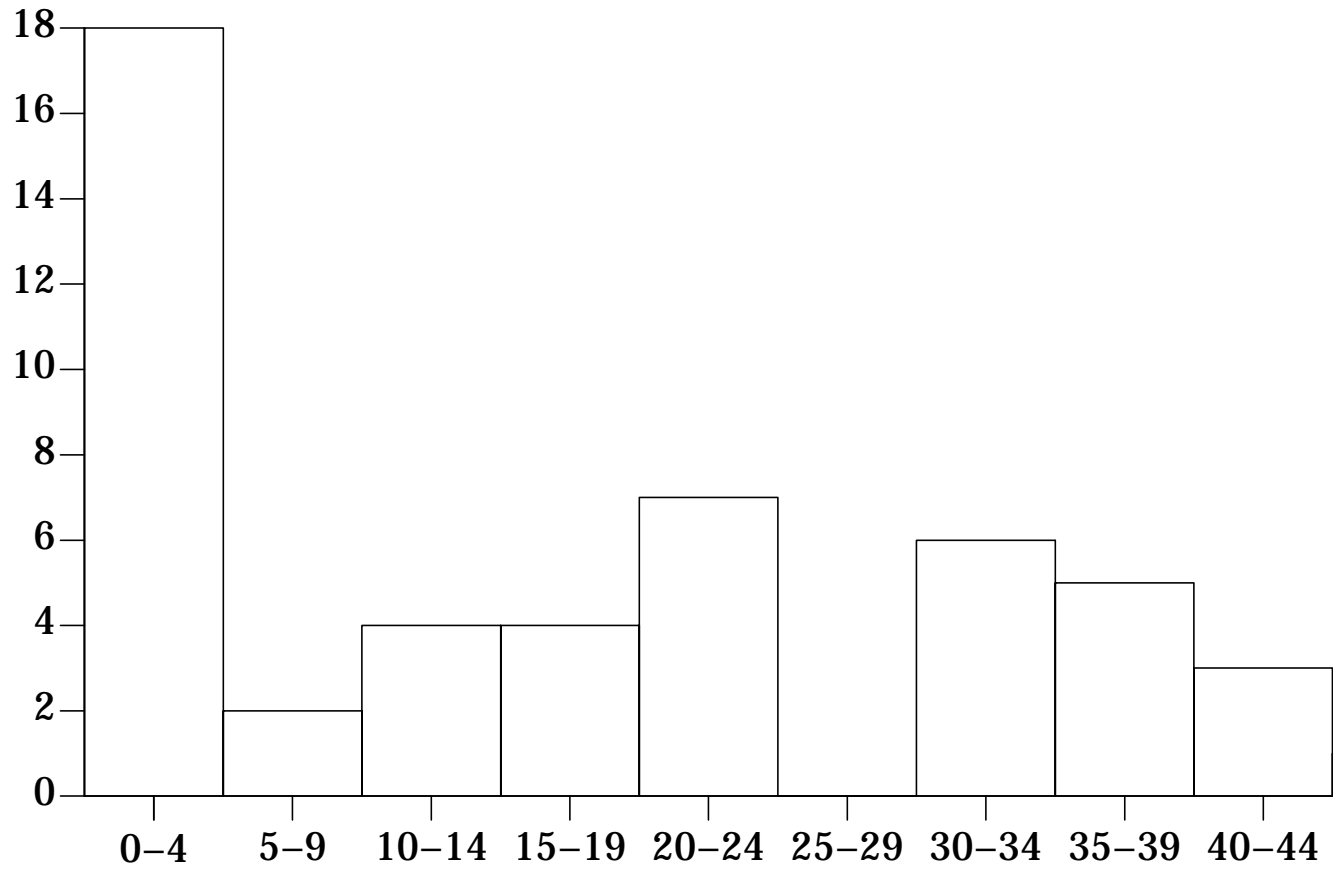Two-Thirds Of Mean vote, Lecture 1, SGTM, 2003, Term 3

- The mean of the 55 numbers chosen was 20.40838 Two-thirds of the mean was 13.60559 One person chose 14.
- And the winner is

Michael Rudland

who will receive $5 from me.

- One person chose 50 (and four chose above 50, including two at 66)
  Five people chose 33 or 34 (i.e. about 2/3 of 50)
  Four people chose 22 (i.e. about 2/3 of 33.3)
  One person chose 15 (i.e. about 2/3 of 22.2)
  One person chose 10 (i.e. about 2/3 of 14.8)
  Two people chose 6 or 7 (i.e. about 2/3 of 9.88)
  No person chose 4 (i.e. about 2/3 of 6.58)
  Fourteen people chose 0 or 1 or between.

Finer results:

Two-Thirds Of Mean vote, Lecture 1, SGTM, 2003, Term 3

John Maynard Keynes:

"...professional investment may be likened to those newspaper competitions in which the competitors have to pick out the six prettiest faces from a hundred photographs, the prize being awarded to the competitor whose choice most nearly corresponds to the average preferences of the competitors as a whole; so that each competitor has to pick, not those faces which he himself finds prettiest, but those which he thinks likeliest to catch the fancy of the other competitors, all of whom are looking at the problem from the same point of view.

It is not a case of choosing those which, to the best of one's judgment, are really the prettiest, nor even those which average opinion genuinely thinks the prettiest.

We have reached the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be."

(The General Theory, p.156, 1936.