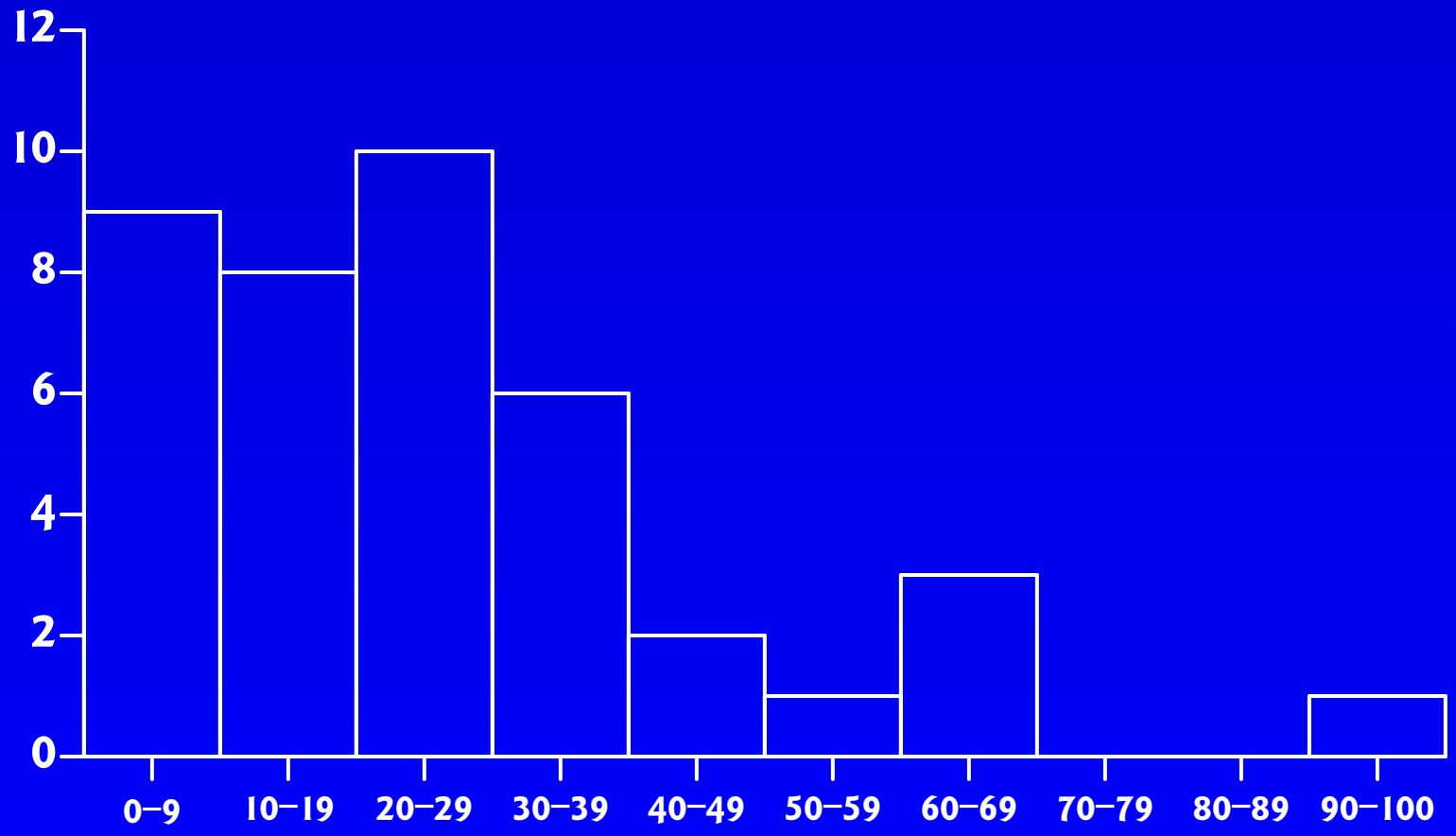
Guess Two-Thirds of the Average

- Choose a number between 0 and 100.
- A prize of $10 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). (That's $\frac{2}{3} \times$ the mean.)
- What should you choose?
- Write down your answer.
- What is the equilibrium choice?

Results:



Two-Thirds Of Mean vote, Term 3, SGTM, 2009

In detail:

- The mean of the 41 numbers chosen was 24.93
  Two-thirds of the mean was 16.62
  One person chose 17: and the winner is

  Khalid Omar

  who receives $10 from me. (The runner-up chose 16.)

- One chose 50; (50 is the random mean).
  Two chose about 33 (i.e., about $\frac{2}{3}$ of 50)
  Five chose about 22 (i.e., about $\frac{2}{3}$ of 33)
  Three chose about 15 (i.e., about $\frac{2}{3}$ of 22)
  Three chose about 10 (i.e., about $\frac{2}{3}$ of 15)
  Six chose 1 or less (0).
  One chose 96. (Go figure.)
  Four chose above 50 — ??

John Maynard Keynes' "Beauty Contest":

"...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.)