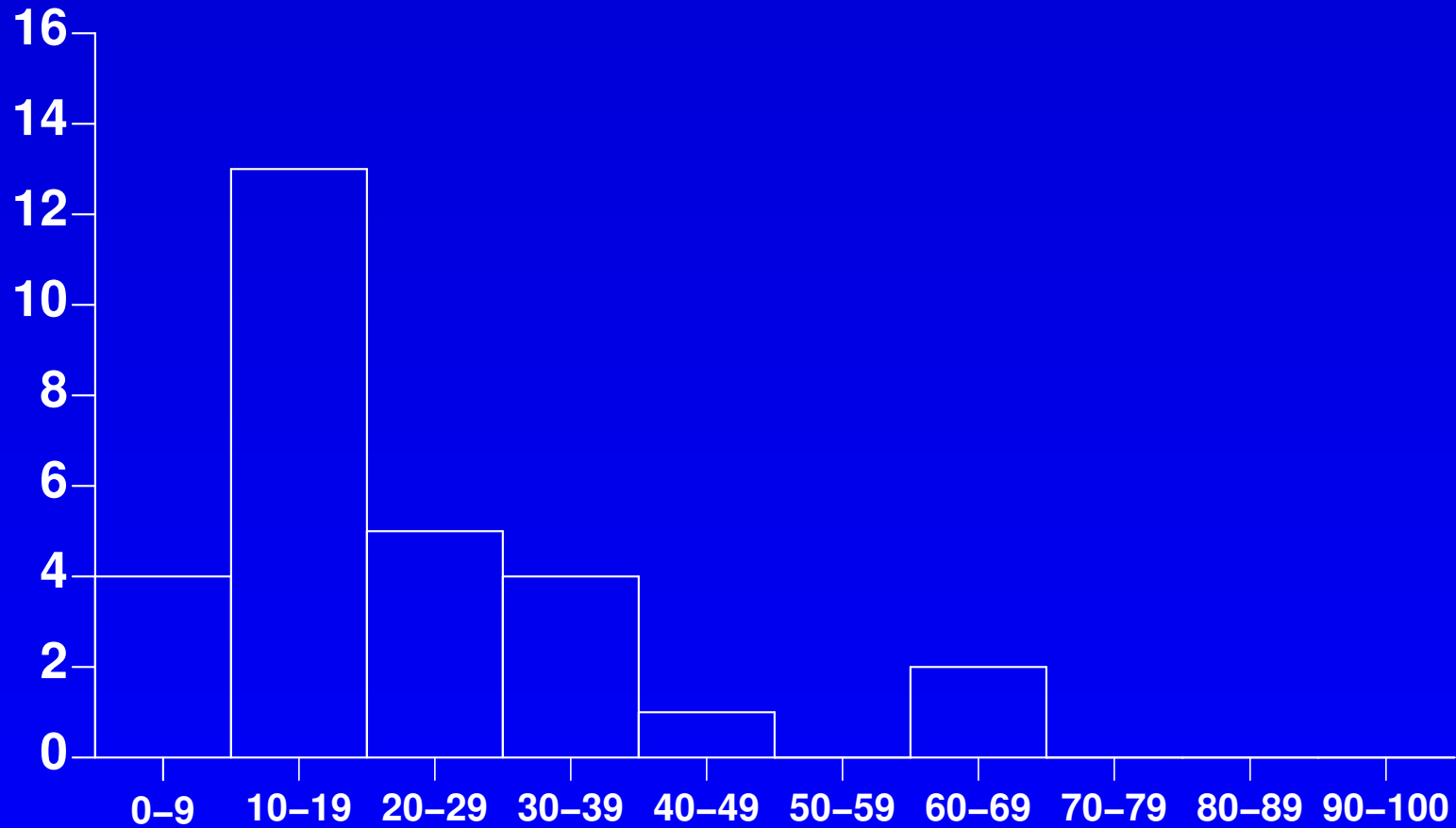


# Guess Two-Thirds of the Average

- 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, Lecture 1, SGTM, 2006***

**In detail:**

- The mean of the 29 numbers chosen was 21.19  
Two-thirds of the mean was 14.13  
One person chose 14: and the winner is

**Mikael**

who receives \$10 from me. Two runners up chose 15.)

- Two chose *above* 50, the random mean  
Three chose about 33 (i.e., about  $\frac{2}{3}$  of 50)  
Two chose about 22 (i.e., about  $\frac{2}{3}$  of 33)  
One chose about 15 (i.e. about  $\frac{2}{3}$  of 22)  
Three chose about 10 (i.e., about  $\frac{2}{3}$  of 15)  
None chose 7 (i.e., about  $\frac{2}{3}$  of 10)  
One chose 1 or less.

## 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.)*