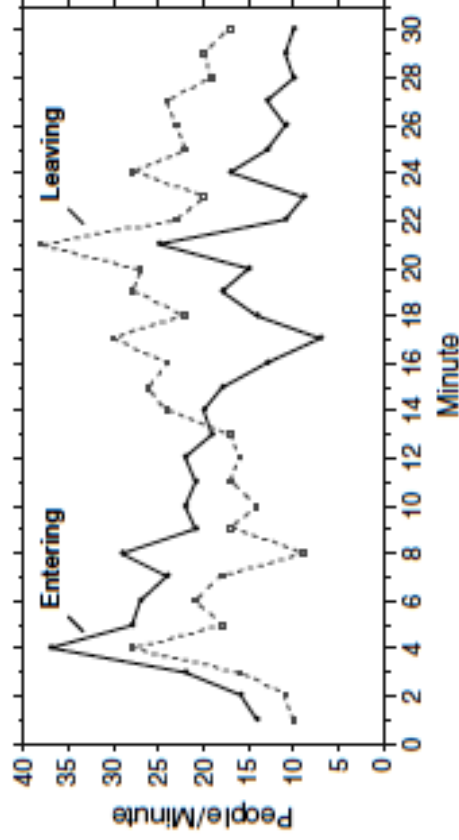


Fig. 3. The department store task

The graph below shows the number of people **entering** and **leaving** a department store over a 30 minute period.



Please answer the following questions.

Check the box if the answer cannot be determined from the information provided.

1. During which minute did the most people enter the store?

Minute 4 (94%)

☐ Can't be determined (0%)

2. During which minute did the most people leave the store?

Minute 21 (94%)

☐ Can't be determined (0%)

3. During which minute were the most people in the store?

Minute 13 (42%)

☐ Can't be determined (17%)

4. During which minute were the fewest people in the store?

Minute 30 (30%)

☐ Can't be determined (28%)

Fully 28 percent indicated that the question could not be answered, including one subject who wrote:

☒ Can't be determined, *by me.*

Note that determining when the most people are in the store does not require any calculation—one need only understand that a stock rises when its inflow exceeds its outflow and falls when outflow exceeds inflow, then note where the two curves cross. Determining when the fewest are in the store does require a qualitative judgment of whether the area between the curves is largest before or after minute 13, but people have no trouble determining which area is larger when asked. The problem, at least among these highly educated subjects, is not the inability to read graphs, but difficulty with the concept of accumulation, with stocks and flows.