

The score *has a past*

Homework scores cluster near full marks. We followed **3,359** online-judge submissions to see how differently students get there, and whether the path travels with the exam.

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Zhengxiang Liu visualization design, D3 implementation



Watch it move

The playable data film, all twelve figures, tables and methods

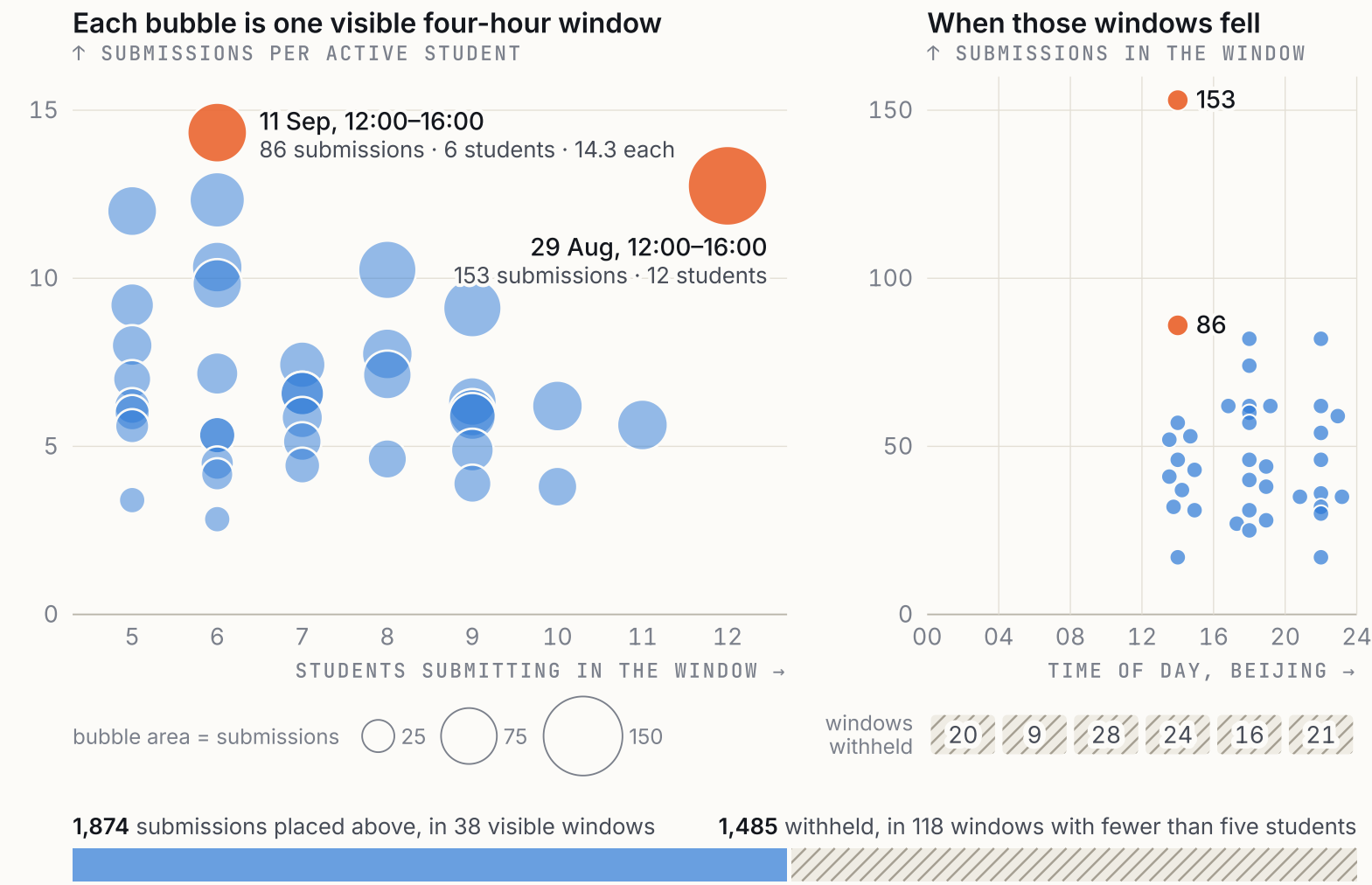
THE QUESTION

In **36 of 43** problem slots, every student who attempted the problem reached full marks in the end. What the 100 does not show is the first try, the retries, or the hour they arrived.

PROCESS how submissions and retries unfold

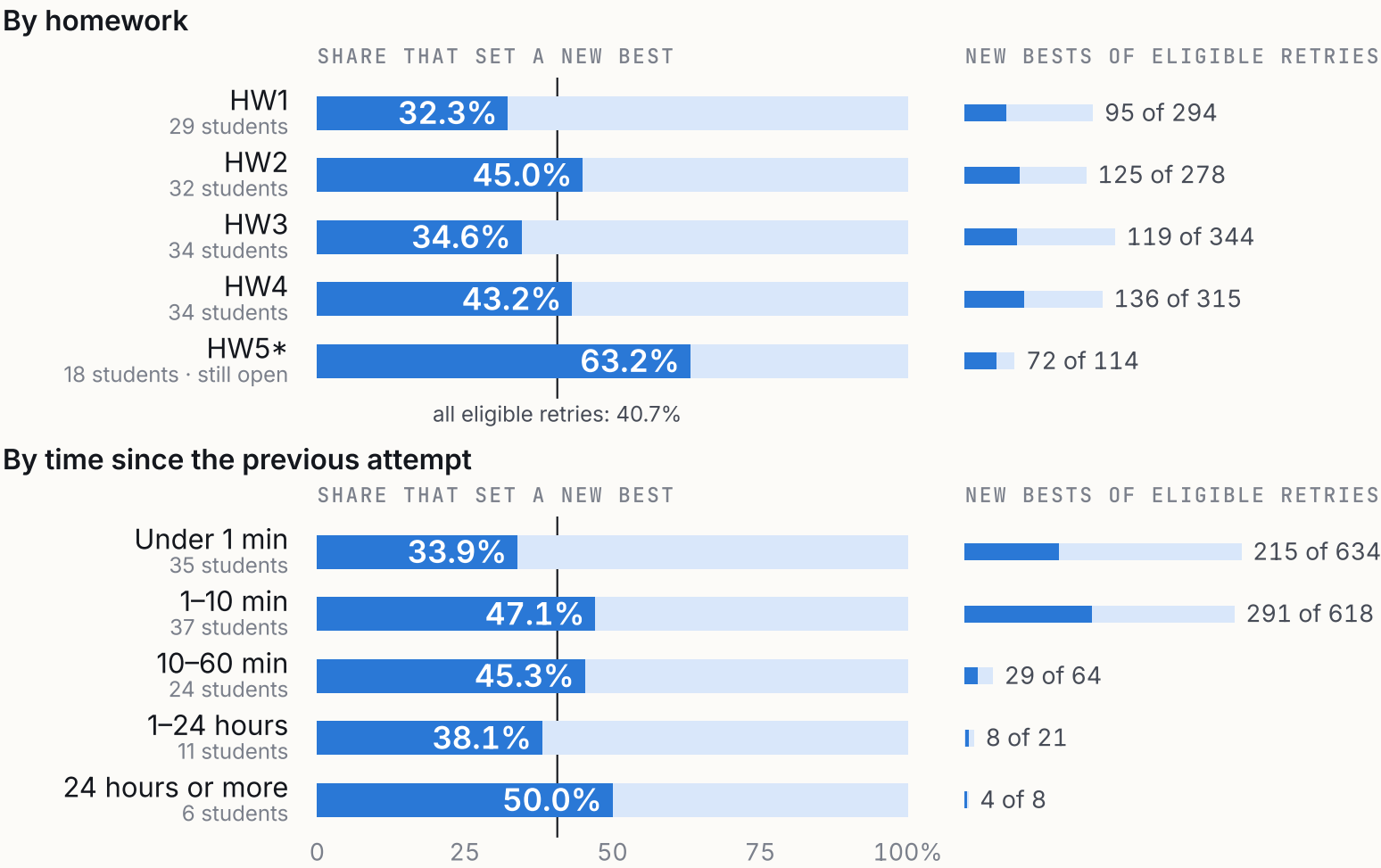
1 WHEN THE WORK ARRIVES

A burst can be many students, or a few students many times.



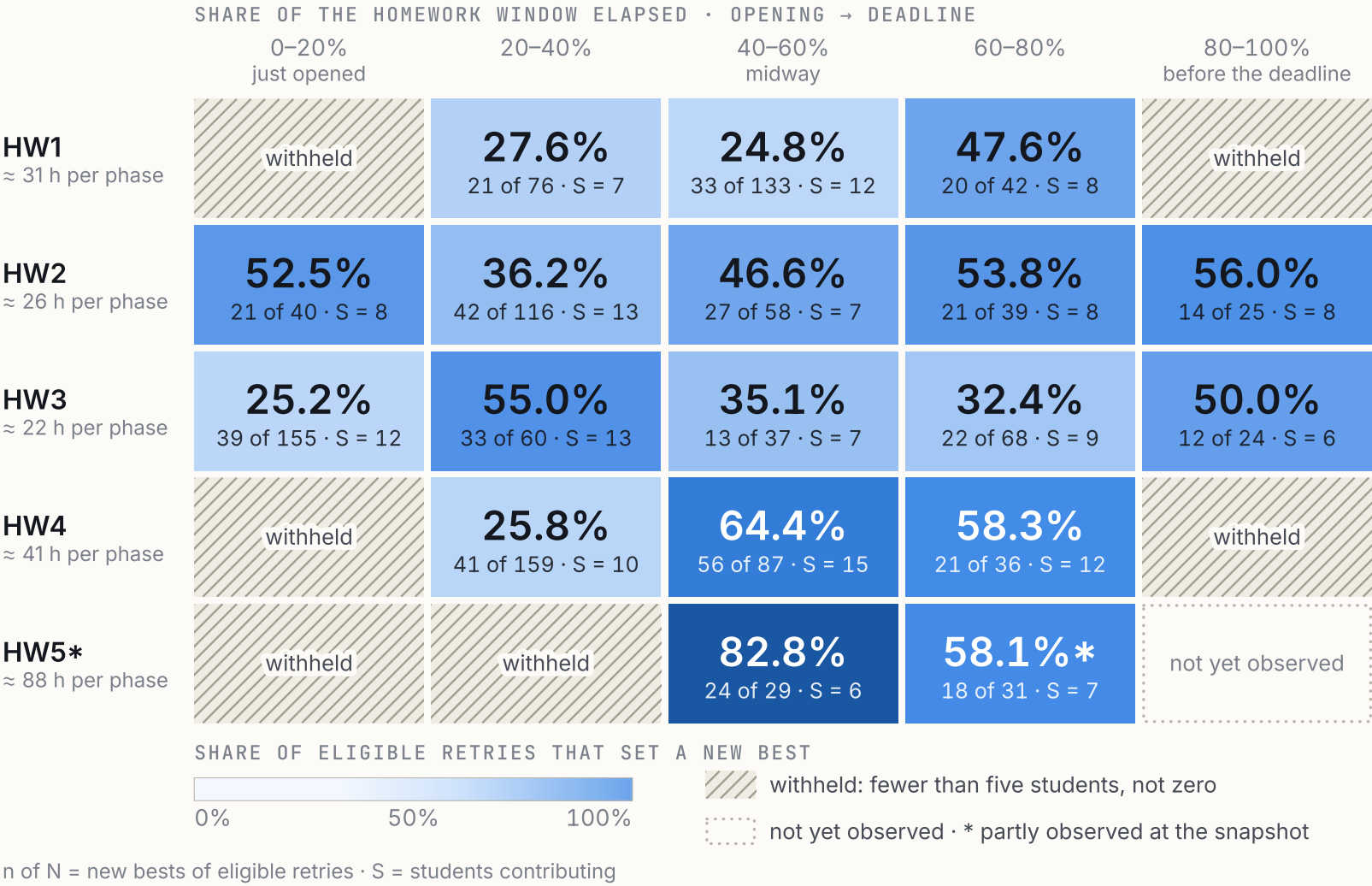
2 DO RETRIES PAY OFF?

547 of 1,345 eligible retries set a new personal best: 40.7%.



3 WHEN IN THE WINDOW?

Retries progress unevenly from opening to deadline, and each homework has its own rhythm.



3,359

submissions inside five homework windows

39

students, 43 problem slots

1,345

retries made below full marks; 547 beat the student's earlier best

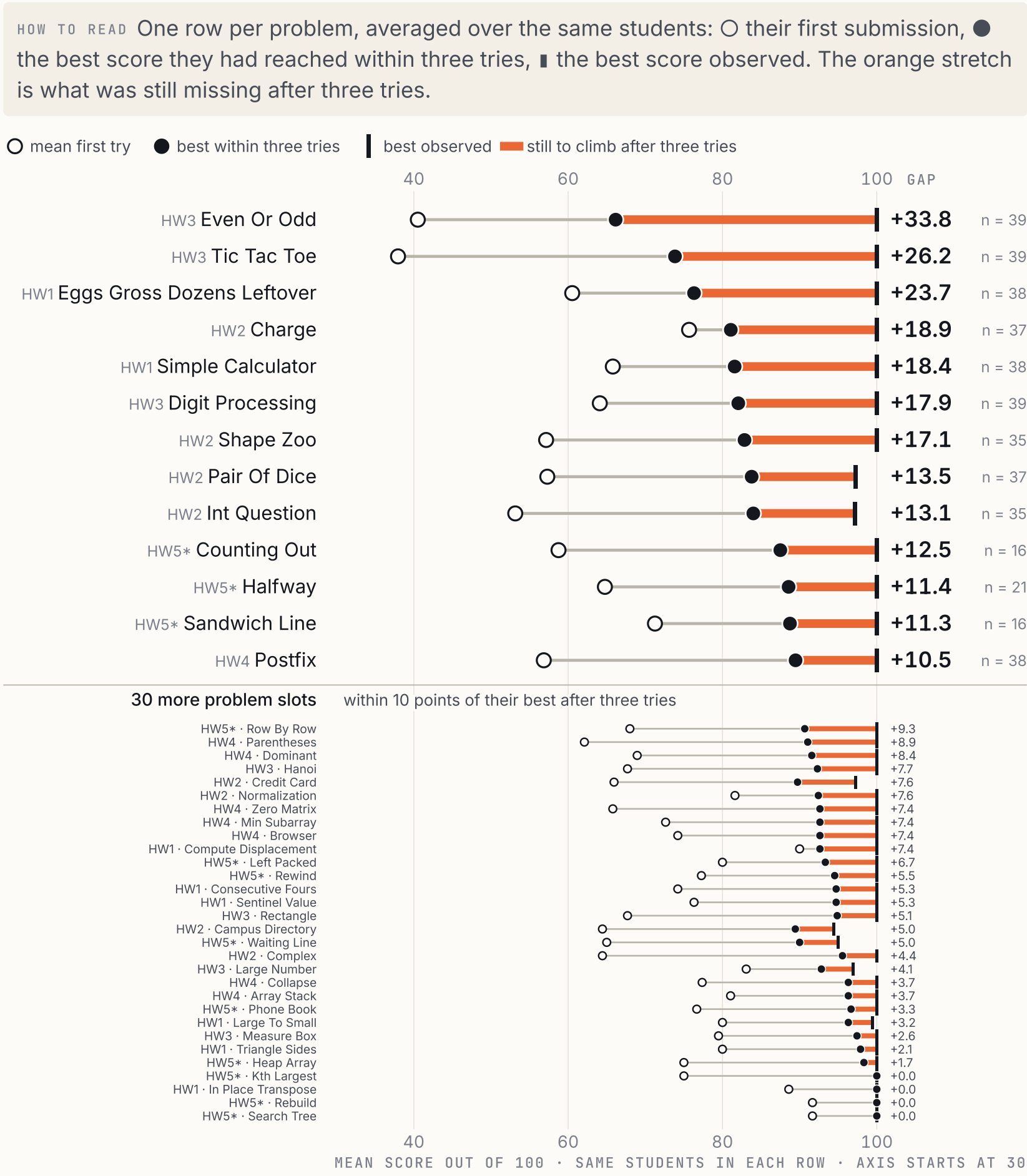
26

midterm grades, a separate pre-exam sample

OUTCOME score gaps and the midterm

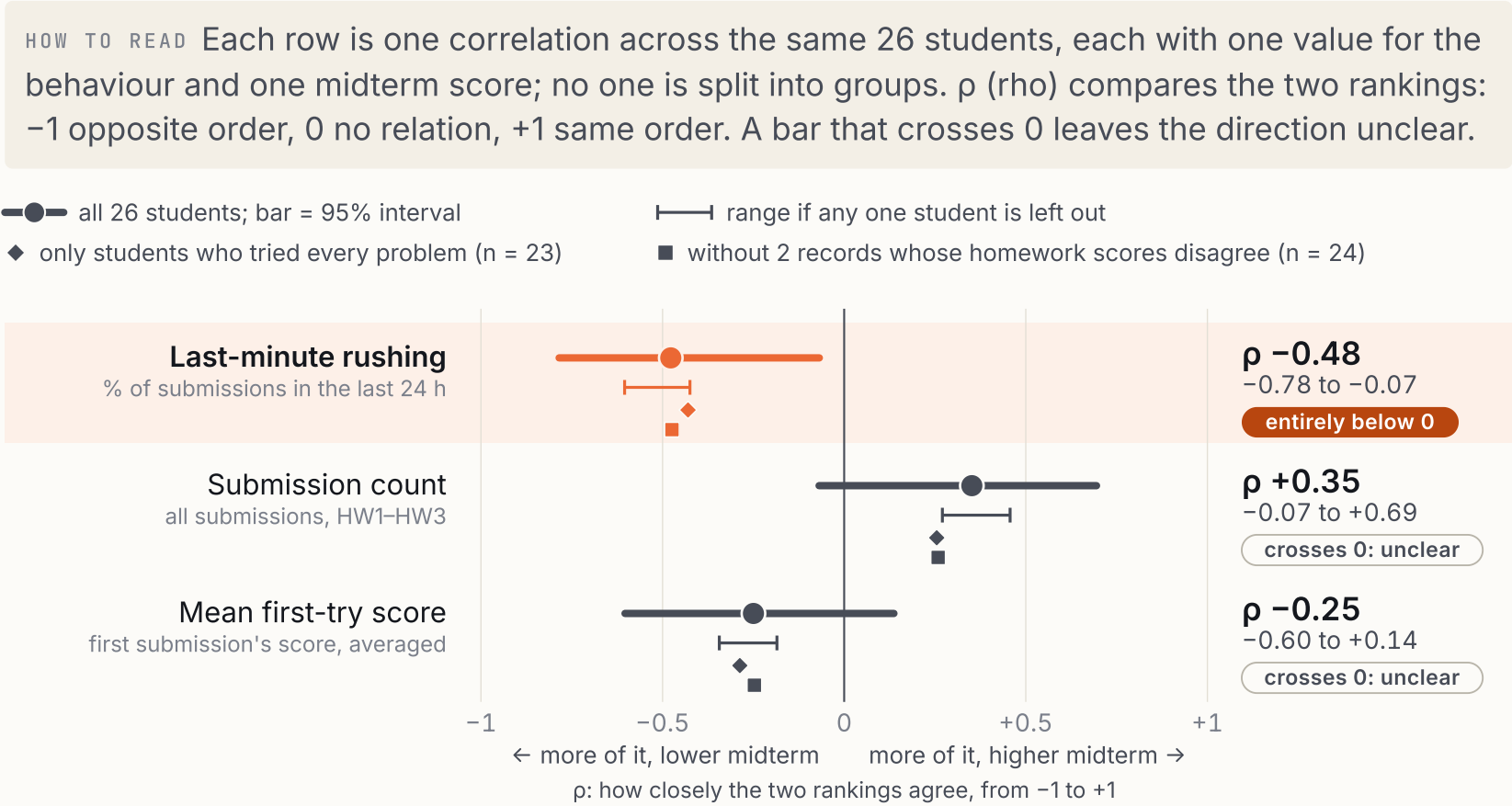
4 WHAT THE 100 HIDES

After three tries, 13 of 43 problems still trail their best score by more than 10 points.



5 DOES RUSHING SHOW IN THE EXAM?

Last-minute rushing went with lower midterm scores.



What the 100 was hiding

One score, many roads.

FIGURES 1 · 4

The same full mark is reached in very different ways: windows crowded with students and windows where a few submit again and again; problems nearly solved on the first try and problems still short after three.

Retries progress unevenly.

FIGURES 2 · 3

40.7% of eligible retries set a new best. The rate differs by homework, by how soon a retry follows the last attempt, and by where in the window it falls.

Rushing went with lower scores.

FIGURE 5

In 26 supplied grades, students who sent more of their work in the final 24 hours tended to score lower on the midterm ($\rho = -0.48$). An association, not a cause.