Reading an Ink Trail on Test Paper

Scoring guide · one credit per question · review written work against each rubric

Reading an Ink Trail on Test Paper

Question 1

Choice (1)

In the same run, mark A is nearer to the start than mark B. In the model that supports A’s dye spending more of the run attached to the paper.

Question 2

Mark A has ratio 2.0/8.0 = 0.25. Mark B has ratio 6.0/8.0 = 0.75. The ratios have no units because both distances are in centimeters.

Question 3

No. The known ink gives ratios 1.5/6.0 = 0.25 and 4.5/6.0 = 0.75. Both match the corresponding unknown ratios, so the results are consistent with a match.

Question 4

Run the two inks side by side with a different solvent while keeping the paper and starting conditions the same. The new solvent could separate dyes that moved alike in water. Accept an equivalent comparison capable of distinguishing inks that match under the first conditions.