

SMART EXAM RESOURCES
IGCSE PHYSICS ANSWERS[SAMPLE SOLUTIONS]
MAIN TOPIC: MOTION FORCES AND ENERGY

Answer 8

1. Explanation of the correct answer (D: The value is incorrect because the student should subtract the reading for end Y from the reading for end X)

Step 1: Identify the ruler readings for both ends of the rod.

The reading for end X (right end) is 94.8 cm.

The reading for end Y (left end) is 99.7 cm.

Step 2: Calculate the correct length of the rod.

To determine the correct length, the student should subtract the left reading from the right reading:

$$99.7 \text{ cm} - 94.8 \text{ cm} = 4.9 \text{ cm}$$

The student incorrectly recorded the length as 94.8 cm, which is actually the starting position rather than the length of the rod.

Therefore, the correct statement is that the student should subtract the readings, making option D the correct choice.