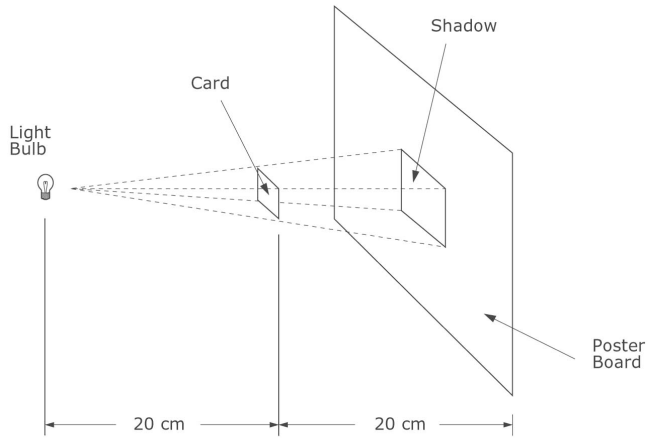


A tiny light bulb is held 20 centimeters to the left of a square card, which is in turn held 20 centimeters to the left of a poster board, as shown. The shadow of the card on the poster board has a side of 10 centimeters.

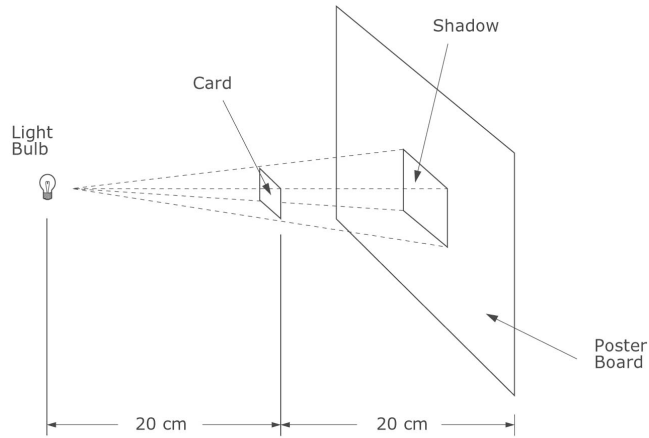


If the poster board is moved 40 cm further to the right so that it is 80 cm from the light, what will be the new side of the card's shadow on the poster board?

- (A) 5 cm
- (B) 10 cm
- (C) 15 cm
- (D) 20 cm

## TIMSS 2003

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S012029

Content Domain

**Physics**

Main Topic

**Light**

Cognitive Domain

**Reasoning and Analysis**

Key

**D**