

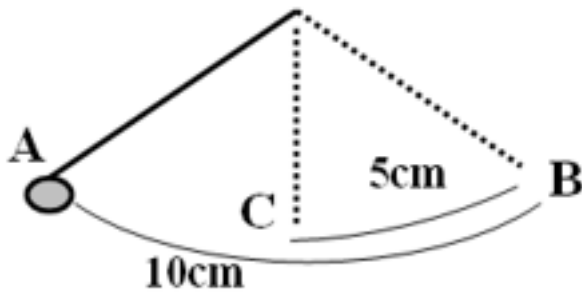
1

Question 16

Questions 16 and 17 refer to the following information

A pendulum is swinging back and forth. With each successive swing, the pendulum travels half the distance of the previous swing.

For example, in its first two swings, a pendulum starting at **A** would first swing 10cm to **B** and then 5 cm to **C**.



Six swings

1:	40
2:	20
3:	10
4:	5
5:	2.5
6:	1.25
	<hr/>
	78.75

If its first swing is 40cm, how far has the pendulum travelled in its first six swings?

- ☐ 120 cm
- ☐ 82.5 cm
- ☐ 78.75 cm
- ☐ 77.5 cm
- ☐ 19.70 cm



Correct answer:

78.75 cm



Hint:

$$40 + 20 + 10 + 5 + 2.5 + 1.25 = 78.75\text{cm}$$
