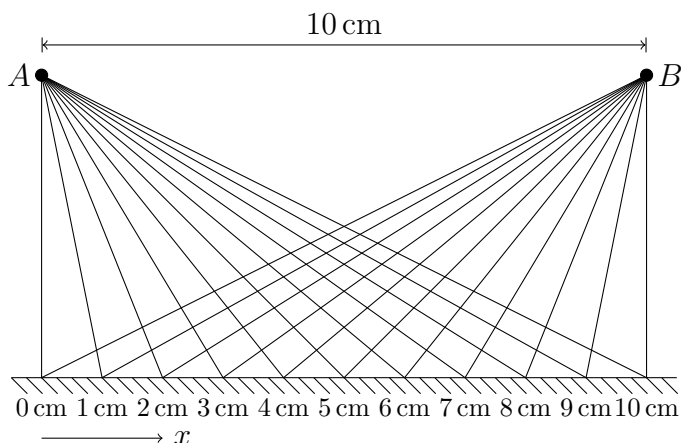


# On Reflexion

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1. The diagram below shows various paths, all of which travel from  $A$  to  $B$  via a mirror.



- (a) Copy the diagram out full size, and measure the path lengths  $A-B$  for the various paths from  $A$  to  $B$  in the diagram below, as the position  $x$  along the mirror is varied, and record your results in a table.

$x/\text{cm}$	$A-B/\text{cm}$

- (b) Plot a graph of the length  $A-B$  on the  $y$ -axis and the position  $x$  on the  $x$ -axis.
- (c) What can you say about the path that light would follow, according to the law of reflexion?
- (d) Extension: Can you calculate the values—perhaps on a computer!—and model it this way?



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