

## Problem



Happy Days amusement arcade is adding a children's rollercoaster ride to its park.

Lengths of steel are soldered together to produce the finished track.

The steel comes in two metre lengths. The owner has decided to use five lengths for the upward incline near the start of the ride.

For health and safety reasons, for every metre that the steel inclines, the horizontal distance along the ground should not be less than four fifths of a metre.



What is the maximum height from the bottom of the upward incline to the top of the upward incline?

