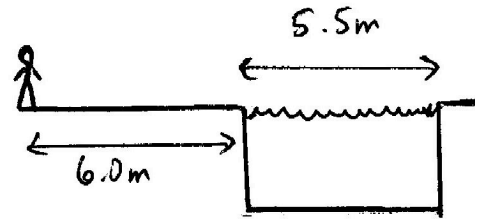


1. A person whose eyes are 1.50 m above the ground is standing 6.00 m from the edge of a swimming pool. The width of the pool is 5.50 m. From that location, the observer is just able to see the bottom corner on the opposite side of the pool. What is the depth of the water? Assume the pool is filled with water to ground level.

Answer: 5.16 m



2. A small object is 10 cm in front of a plane mirror. You are standing behind the object, a distance of 30 cm from the mirror. To see the image of the object in the mirror, for what distance should you focus your eyes?

3. A small object is placed one-third of the way between two parallel mirrors separated by a distance d . Find the 4 images that lie closest to the object. For each of the 4 images, sketch bundles of rays that show the location of the image.

