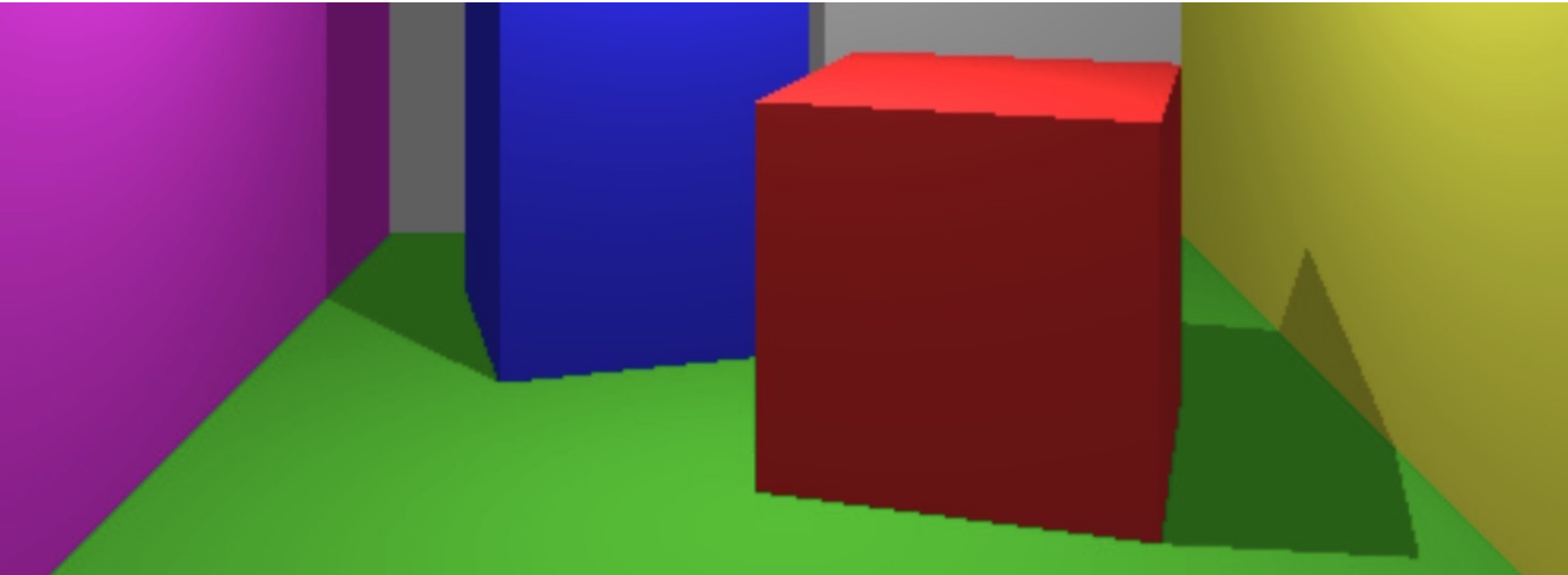


Shadows

With light comes shadow !

But how on earth do we compute this ?



Can the surface see the light ?

We've already used raytracing to determine the visibility of triangles from the camera

We can use the same technique to check if a surface can "see" the light

We fire a "shadow ray" from surface towards light
If it hits a triangle before reaching the light
the surface must be in shadow...



The diagram illustrates the formation of a shadow. At the top center is a yellow sun with rays. Two black arrows originate from the sun: one points down and to the left towards a point on a green horizontal ground line, and the other points down and to the right towards another point on the same ground line. A green rectangular object is positioned between the sun and the ground. A grey arrow points from the top-left corner of this object towards the sun. The text 'in shadow' is located below the object, between the two points where the rays hit the ground.

in shadow