

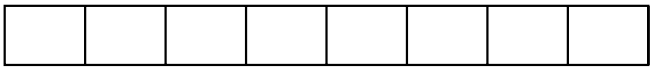
a) Shadow map: $z(t)$



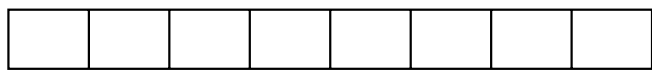
b) Dist. object point to light: z'



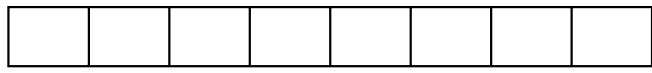
c) Corresponding shadow map index



c) Comparison: $z(t) - z'$



Shadow decision (1 bit): $H(z(t) - z')$

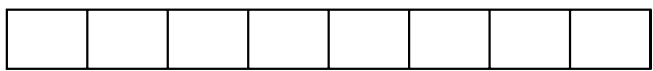


Note: t position in map, H Heaviside function:

$$H(x) = \begin{cases} 1, & \text{for } x \geq 0 \rightarrow \text{no shadow} \\ 0, & \text{for } x < 0 \rightarrow \text{shadow} \end{cases}$$

d) Comparison with constant bias:

$$z(t) + c - z'$$



Shadow decision (1 bit):

