Problem Solving:
1) Determine $H(w) = H(z)$ eval at $z=e^{jw}$
2) Plug in each freq from the input into $H(w)$ eval at $w=w_0$ -> this is how system responds to that part of the input
3) Multiply result to part of $x(n)$ that corresponds to $w_0$ to get $y(n)$