

Panel 1

Complex homework:

① Find the real and imaginary (principle) parts of:

a) π^i

b) i^π

② Find the magnitude (abs. value) as a decimal # for:

a) $\cos(3i)$

b) $\sinh(3i)$

What is interesting about your answers?

③ Suppose $z(t) = (5+i)t + 7t$ and $w(t) = 3ie^{zit}$. Find

a) $z'(t)$

b) $w'(t)$

c) $\int_0^1 z(t) dt$

d) $\int_0^\pi w(t) dt$