

Problem Wk.8.3.6: Period of Pole

Implement the following function (refer to Section 5.5.2 in the course notes - especially the Summary):

- `periodOfPole`: takes a pole as an argument and returns the period of oscillation, if the pole corresponds to periodic response and `None` if the pole corresponds to non-periodic response. Note that a response that alternates between positive and negative is periodic (a period of 2).

We have given you a helper function that converts a complex number to the polar representation.

```
def periodOfPole(pole):  
    pass  
  
def complexPolar(p):  
    if isinstance(p, complex):  
        return (abs(p), math.atan2(p.imag, p.real))  
    else:  
        if p < 0:  
            return (-p, math.pi)  
        else:  
            return(p, 0.0)
```

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