## → Task2: Math

Q1) https://www.hackerrank.com/challenges/polar-coordinates?isFullScreen=true

```
import cmath
inp = complex( input("Enter a complex num: ") )
print( abs(inp) )
print( cmath.phase(inp) )

Enter a complex num: 1+29j
    29.017236257093817
    1.5363272257953886
```

Q2) https://www.hackerrank.com/challenges/triangle-quest-2?isFullScreen=true

```
for i in range(1,int(input("N: "))+1):
    print(pow(((pow(10,i)-1)//9), 2))

    N: 7
    1
    121
    12321
    1234321
    123454321
    12345654321
    1234567654321
```

Q3) https://www.hackerrank.com/challenges/find-angle?isFullScreen=true

```
import math
AB,BC=int(input("A: ")),int(input("B: "))
hyp=math.hypot(AB,BC)
res=round(math.degrees(math.acos(BC/hyp)))
degree=chr(176)
print(res,degree, sep='')

A: 5
B: 6
40°
```

Q4) https://www.hackerrank.com/challenges/python-power-mod-power?isFullScreen=true

```
a = int( input() )
b = int( input() )
m = int( input() )
print( pow(a, b) )
print( pow(a, b, m) )
```

Q5) https://www.hackerrank.com/challenges/python-integers-come-in-all-sizes?isFullScreen=true

```
a = int( input("a:") )
b = int( input("b:") )
c = int( input("c:") )
d = int( input("d:") )

print( pow(a, b) + pow(c, d) )

a:2
  b:4
  c:3
  d:2
  25
```

Q6) https://www.hackerrank.com/challenges/python-mod-divmod?isFullScreen=true

```
a = int( input("a: ") )
b = int( input("b: ") )
print(a//b)
```

Q7) https://www.hackerrank.com/challenges/python-quest-1?isFullScreen=true

```
for i in range(1,int(input("n: "))):
    print( ((pow(10, i)-1)//9) * i )
    n: 4
    1
    22
    333
```

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✓ 3s completed at 11:35

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