E26

Design	Pros	Cons
Design 1	Memory usage is better and so more efficient for class allocation	Not efficient and may lose precision after multiple conversions.
Design2	More efficient for and cartesian polar conversion	The con is that it deals with both polar and cartesian (it should only take care of polar) Less efficient for allocation for cartesian input
Design3	More efficient for cartesian and polar conversion	The con is that it deals with both polar and cartesian (it should only take care of Cartesian) Less efficient for allocation for polar input
Design4	Most efficient for conversion	Memory hungry, it uses twice the memory. And so least efficient for allocation overall
Design5	Most efficient overall and has clear separation between both polar and cartesian representations. Also has more rigor in terms of code and is more up to standard of what a software engineer should produce as a product.	Need to allocate the right subclass.

E30

Design	Conversion	Polar allocation	Cartesian allocation
Design1	7178	2	2
Design2	5	4*	5079
Design3	5	5079*	4
Design4	n/a	n/a	n/a
Design5	5	9*	9

* Values were determined from cartesian results.

All these values are in milliseconds.

E25

A) Some operations are quicker and radiance and other operations are quicker in cartesian.
B) It will keep on converting therefore there will be a massive efficiency problem
C) Done