Trigonometric Graphs.

* Let's have a look at the basic trigonometric graphs and their characteristics.
→ We will call them the "Mother functions"

* Terminology:
* Notes and theory:

1) When sketching trig graphs, you need to label the fallowing;
- both axes ⇒ y as usuall, x in degrees.
- x- and -y- intercepts
- turning points
- end points (if not on axes)
- asymptotes (Tan graph)

2) For "sin" and "cos" graphs: "mother functions"
- 90° intervals
- Period = 360°
- Amplitude = 1

3) For "tan" graph : "mother function"
- intervals of 45°
- period = 180°
- amplitude can't be defined.
- asymptotes at $x = 90^\circ$ and $x = 270^\circ$

→ what do these words mean ??

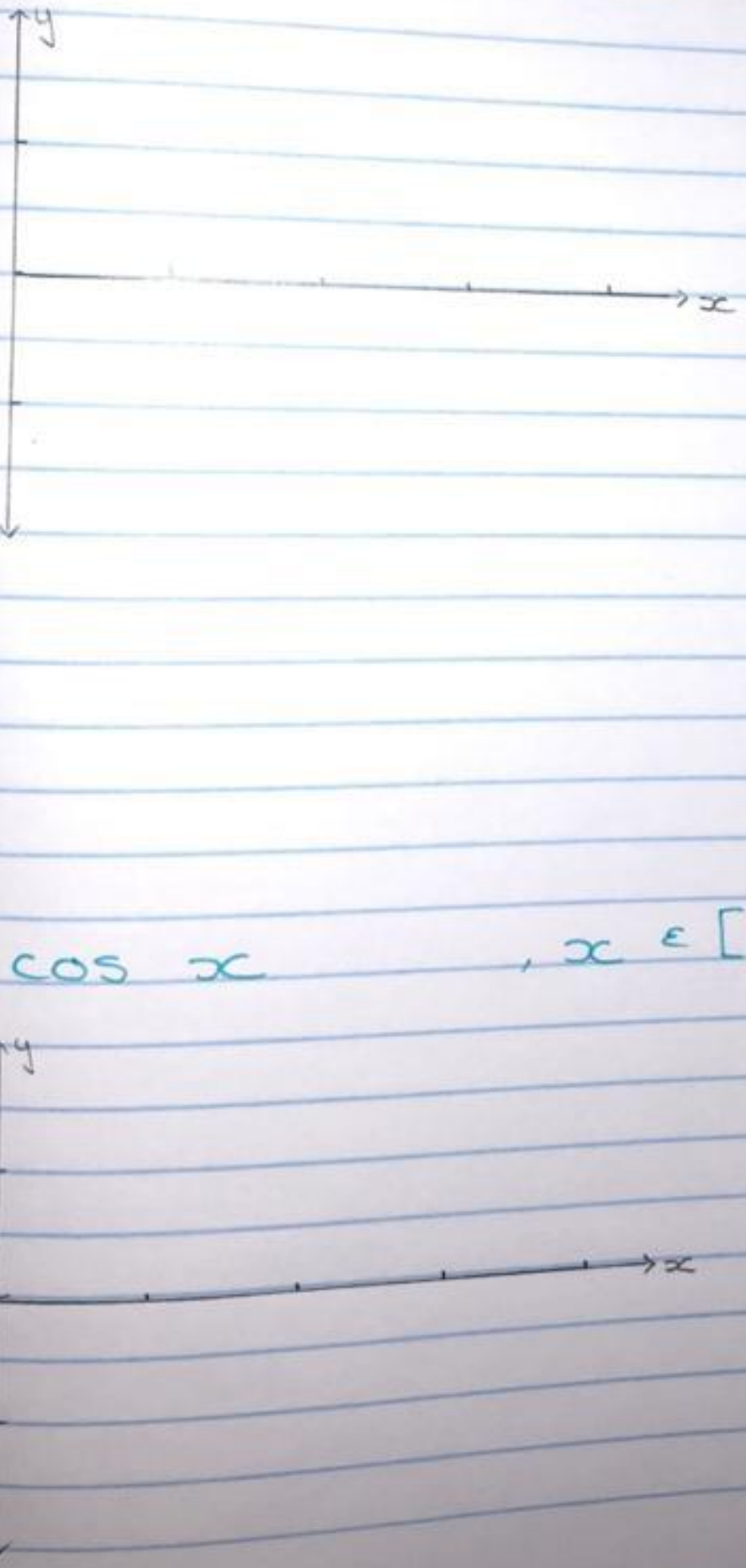
- Period ??
  → how long, in degrees, does it take the graph to complete it's form.
  → Sin & Cos → 360°
  → Tan → 180°

- Amplitude ??
  → they "a" of the equation, {the stretch}
  → $\frac{\min + \max}{2}$

- Asymptote ??
  → line that graph will NEVER touch / cross.

Mother Functions 4
Sin and Cos.

* $y = \sin x$, $x \in [0°; 360°]$



* $y = \cos x$, $x \in [0°; 360°]$

Mother Function 4

Tan

* $y = \tan x$, $x \in [0° ; 360°]$