Y= A sin( B(x-C) ) + D

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| x/B+c | x/B | x | y | Ay | Ay+D |
|  |  | 0 | 0 |  |  |
|  |  | p/2 | 1 |  |  |
|  |  | p | 0 |  |  |
|  |  | 3p/2 | -1 |  |  |
|  |  | 2p | 0 |  |  |

Y= A cos( B(x-C) ) + D

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| x/B+c | x/B | x | y | Ay | Ay+D |
|  |  | 0 | 1 |  |  |
|  |  | p/2 | 0 |  |  |
|  |  | p | -1 |  |  |
|  |  | 3p/2 | 0 |  |  |
|  |  | 2p | 1 |  |  |

Y= A tan( B(x-C) ) + D

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| x/B+c | x/B | x | y | Ay | Ay+D |
|  |  | 0 | 0 |  |  |
|  |  | p/4 | 1 |  |  |
|  |  | p/2 | inf |  |  |
|  |  | 3p/4 | -1 |  |  |
|  |  | p | 0 |  |  |

Y= A cot( B(x-C) ) + D

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| x/B+c | x/B | x | y | Ay | Ay+D |
|  |  | 0 | inf |  |  |
|  |  | p/4 | 1 |  |  |
|  |  | p/2 | 0 |  |  |
|  |  | 3p/4 | -1 |  |  |
|  |  | p | inf |  |  |

Sec : graph cos and last step invert the graph

Csc: graph sin and last step invert the graph

Domain exclusions: anywhere there’s an infinity + k\*period