

1-ая основная формула

$$\sin^2 x + \cos^2 x = 1$$

2-ая основная формула

(любая из 4-х)

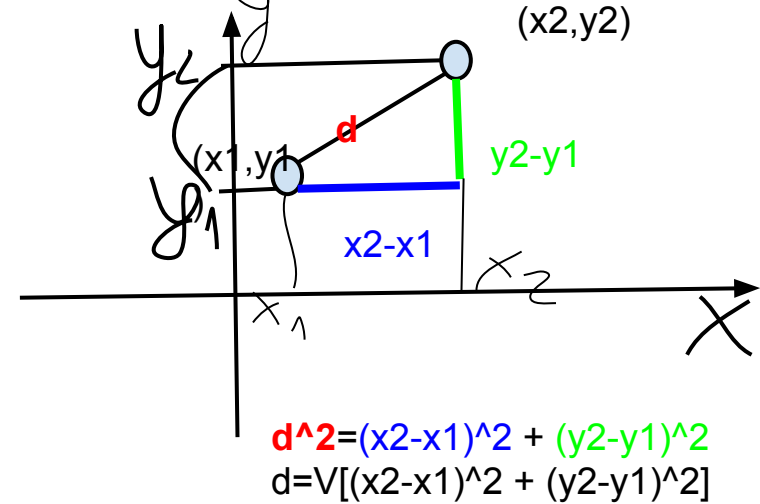
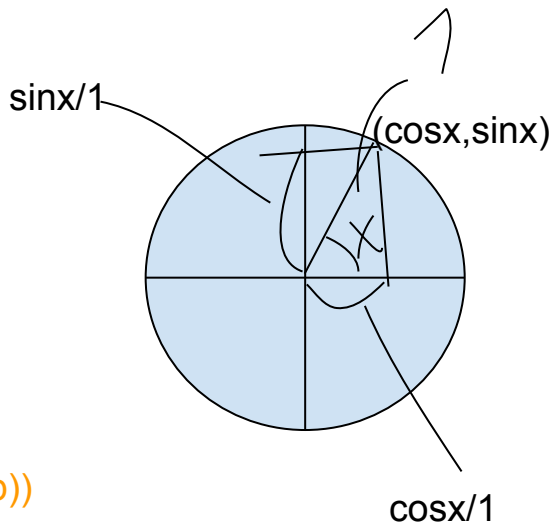
$$\sin(x+y) = \sin x \cos y + \sin y \cos x$$

$$\sin(x-y) = \sin x \cos y - \sin y \cos x$$

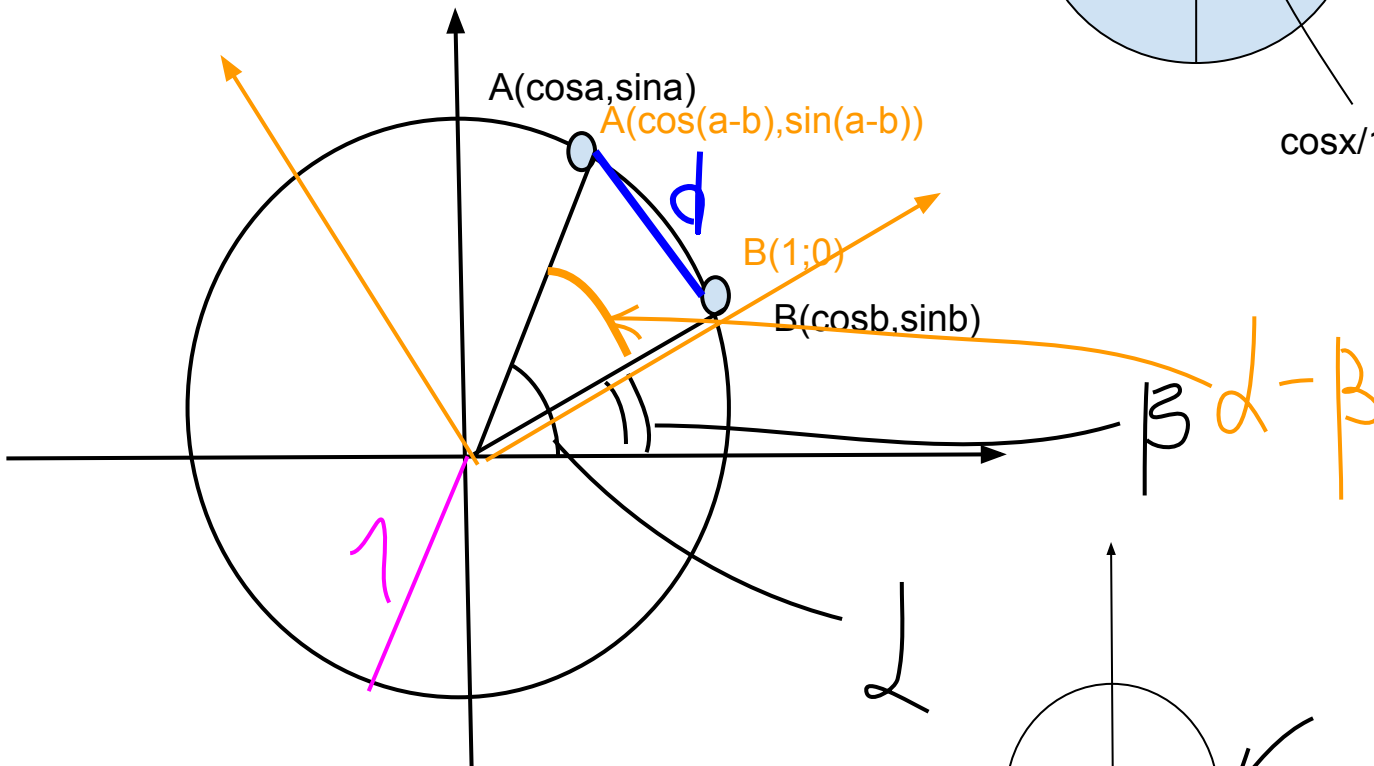
$$\cos(x+y) = \cos x \cos y - \sin x \sin y$$

$$\cos(x-y) = \cos x \cos y + \sin x \sin y$$

$$(a-b)^2 = (-1 \cdot (b-a))^2 = (-1)^2 \cdot (b-a)^2 = (b-a)^2$$



не по человечески



$$d^2 = (\cos a - \cos b)^2 + (\sin a - \sin b)^2 = \cos^2 a - 2\cos a \cos b + \cos^2 b + \sin^2 a - 2\sin a \sin b + \sin^2 b = 2 - 2(\cos a \cos b + \sin a \sin b)$$

$$d^2 = (\cos(a-b) - 1)^2 + (\sin(a-b))^2 = \cos^2(a-b) - 2\cos(a-b) + 1 + \sin^2(a-b) = 2 - 2\cos(a-b)$$

$$2 - 2(\cos a \cos b + \sin a \sin b) = 2 - 2\cos(a-b)$$

$$2 - 2(\cos a \cos b + \sin a \sin b) = 2 - 2\cos(a-b)$$

$$\cos(a-b) = \cos a \cos b + \sin a \sin b$$

