

1-2-18

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

$$e_b = (\cos b, \sin b), e_a = (\cos a, \sin a)$$

$$b = (b_1, b_2) \quad a = (a_1, a_2)$$

$$\rightarrow e_a \cdot e_b = \cos a \cdot \cos b + \sin a \cdot \sin b$$

$$* e_a \cdot e_b = |e_a| |e_b| \cdot \cos \theta$$

$$|e_a| |e_b| \cdot \cos \theta = \cos a \cdot \cos b + \sin a \cdot \sin b$$

$$1 \cdot 1 \cos(a-b) = \cos a \cdot \cos b + \sin a \cdot \sin b$$