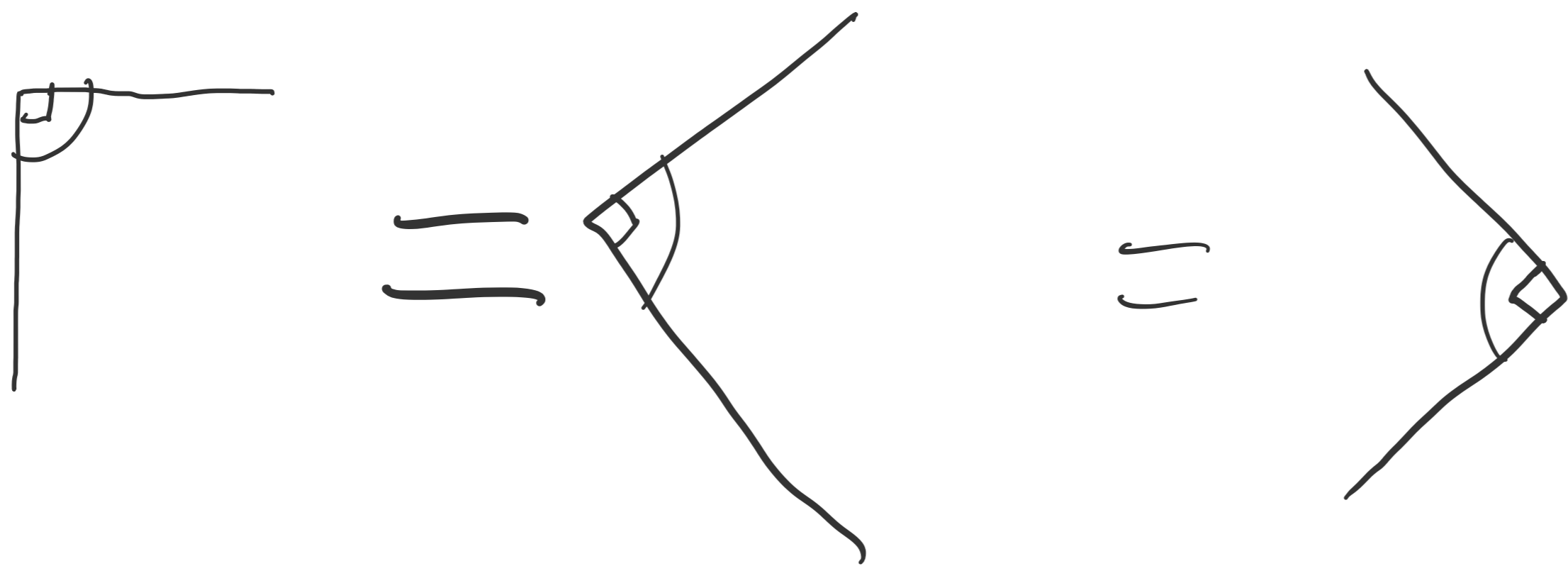
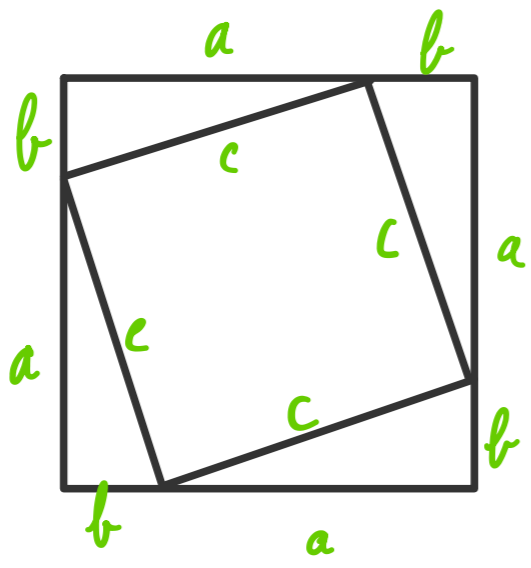


5. Much lines are parallel



2)

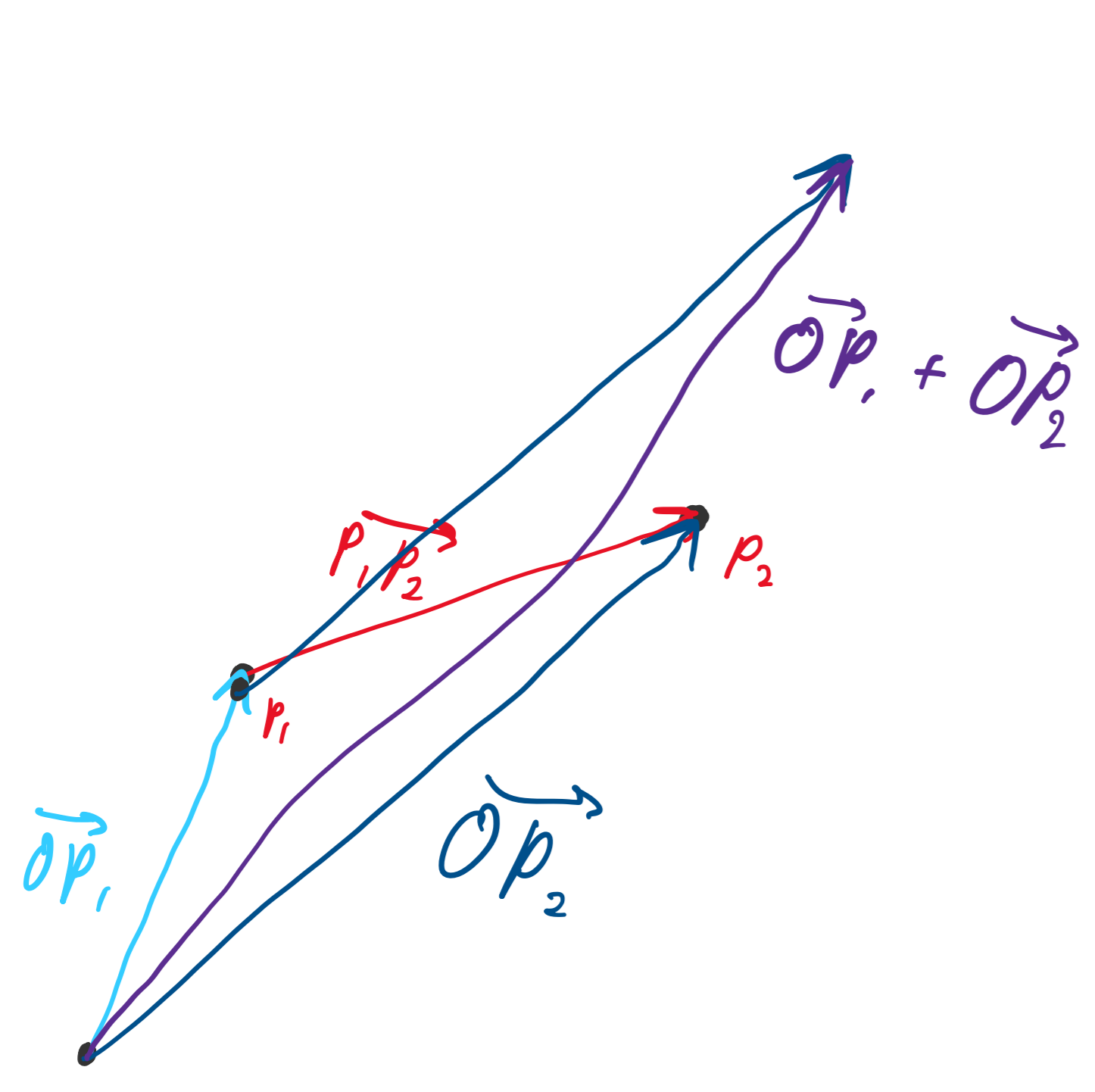


$$(a+b)^2 = 4 \cdot \frac{1}{2} ab + c^2$$

$$a^2 + 2ab + b^2 = 2ab + c^2$$

$$a^2 + b^2 = c^2$$

- 3₁) you end up one meter to the right/left
- 3₂) you end up at the same place, facing the right/left
- 3₃) 270° (not 180° , as if it would be on a triangle)
- 3₄) no, the Earth is not flat
- 4) $d = \sqrt{2R^2} = \sqrt{2} R$
- 5₁) $\sqrt{300^2 + 400^2} = \sqrt{90000 + 160000} = \sqrt{250000} = 500 \text{ m}$
- 5₂) $300 + 400 = 700 \text{ m}$
- 6) No, you end up 90° on the Earth - sphere to the right
 first



8) $a \cdot b = \|a\| \|b\| \cos \angle a,b = \|b\| \|a\| \cos \angle a,b = \|b\| \|a\| \cos(\pi - \angle b,a) = \|b\| \|a\| \cos \angle b,a = b \cdot a$

9)