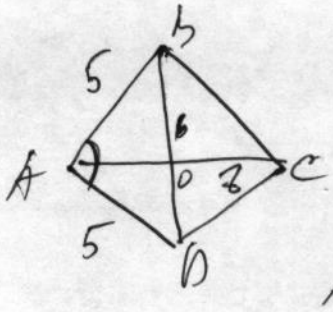
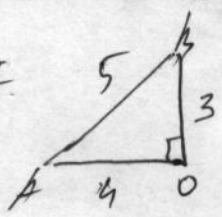




$\triangle ABO$ – прямоугольный $\Rightarrow$

по т. Пифагора: $AB = \sqrt{9+16} = 5$

$AB = BC = CD = AD$ – т.к. ромб

по т. cos:

$BD^2 = AB^2 + AD^2 - 2AB \cdot AD \cos\alpha \Rightarrow$

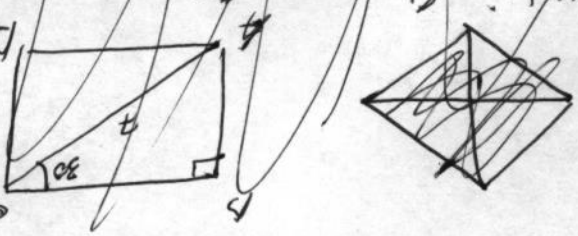
$36 = 2 \cdot 25 - 2 \cdot 25 \cos\alpha$

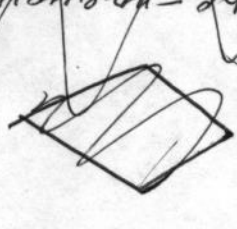
$50\cos\alpha = 14$

$\cos\alpha = \frac{7}{25}$

$\angle A = \angle C = \arccos\frac{7}{25}.$

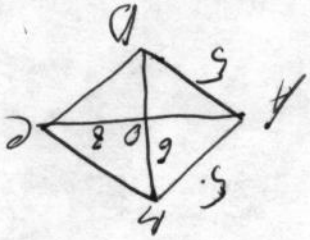
$\angle B = \angle D = 180 - \arccos\frac{7}{25}.$





$\triangle ABC$ – прямоугольный: $\sin 30 = \frac{AB}{AC} \Rightarrow AB = AC \sin 30 = 9 \cdot \frac{1}{2} = 3,5.$

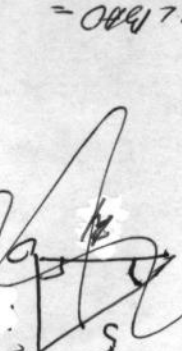
$\cos 30 = \frac{BC}{AC} \Rightarrow BC = AC \cos 30 = \frac{9\sqrt{3}}{2} = 3,5\sqrt{3}$



$OB = 3$

$AB = \sqrt{9+16} = 5$

$AO = 4$



$\sin\angle BAO = \frac{3}{5}$

$\cos\angle BAO = \frac{4}{5}.$

$\sin\angle ABO = \frac{4}{5}$

$\cos\angle ABO = \frac{3}{5}.$

$\angle A = \angle C = \alpha < BAO$

$\angle B = \angle D = \beta < ABO$

$\sin(\alpha < (BAO)) = 2\sin\beta < BAO \cdot \cos\beta < BAO =$

$\cos\beta < ABO = \frac{3}{5}.$

$= 2 \cdot \frac{3}{5} \cdot \frac{4}{5} = \frac{24}{25}$