EXERCISE 1

Calculate the distance between the points $A(4,3,3)$ and $B(0,3,6)$.

Calculate the distance between the points $A$ and $B$. 
Calculate the distance from the point $A(1,0,1)$ to the plane $\alpha : 4x + y + 4z = 36$. 

Calculate the distance between the point $A$ and the plane $\alpha$. 

\[ \alpha_2 \]

A''

A'

\[ \alpha_1 \]
EXERCISE 3

Calculate the bisector plane of the planes $\alpha : 4x + y + 4z = 36$ and $\beta : 4x + y + 4z = 8$.

Draw the bisector plane of the planes $\alpha$ and $\beta$. 
EXERCISE 4

The distance from the point $P(1,2,3)$ to the point $A$ located in the axis of abscissas is 7. Calculate the coordinates of the point $A$.

Find the projections of the point $A$ if we know that this is located in the floor-line, being the distance to the point $P$ 70 mm.
EXERCISE 5

Calculate the distance from the point \( P(3, 4, 5) \) to the line \( r : \frac{x+1}{1} = \frac{y+2}{2} = \frac{z+5}{-1} \).

Find the distance between the point \( P \) and the line \( r \).