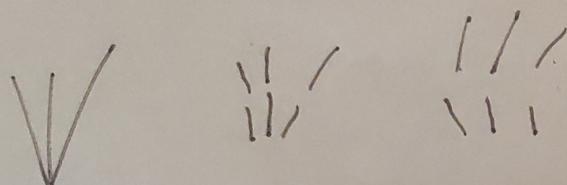
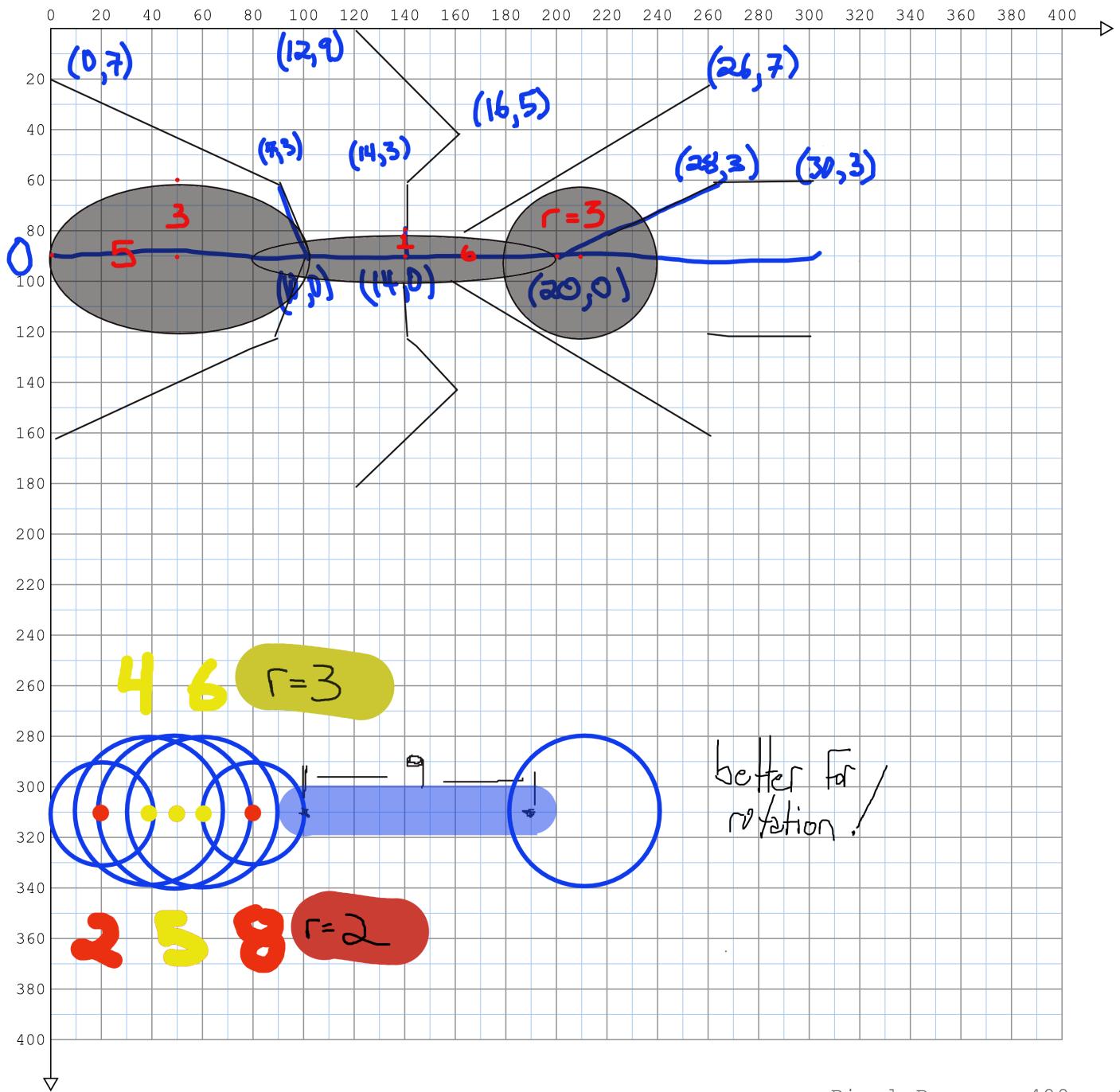


SEGMENTED

GRASS





Pixel Paper - 400 x 400
Graph Paper for Screen Coordinates

Aut Angles \rightarrow we have a vector x_a, y_a and a rotation angle θ

$$\sin \phi = \frac{y_a}{h}$$

$$\cos \phi = \frac{x_a}{h}$$

$$\sin(\phi + \theta) = \frac{y}{h}$$

$$\cos(\phi + \theta) = \frac{x}{h}$$

Recall $\sin(A+B) = \sin A \cos B + \cos A \sin B$

$$\cos(A+B) = \cos A \cos B - \sin A \sin B$$

So, $\frac{y}{h} = \sin \phi \cos \theta + \cos \phi \sin \theta$

$$\frac{y}{h} = \frac{y_a}{h} \cos \theta + \frac{x_a}{h} \sin \theta$$

$$y = y_a \cos \theta + x_a \sin \theta$$

And,

$$\frac{x}{h} = \cos \phi \cos \theta - \sin \phi \sin \theta$$

$$x = x_a \cos \theta - y_a \sin \theta$$