Determining the relationship between distance between the ball and the number of pixels the ball occupies in the image

Distance = 64.9

Pixels occupied by ball in encoded image = 59



Distance=150.7mm

Pixels occupied by ball in encoded image = 41



Distance = 270.2mm

Pixels occupied by ball in encoded image = 23



Distance = 430.8

Pixels occupied by ball in image = 11



Distance = 647.1

Pixels occupied by ball in image = 10



Distance = 763.3

Pixels occupied in image = 9



Distance = 1009.9

Pixels occupied by ball in image = 9



**Distance to ball estimate function**

Distance=



Distance

to ball (mm)

Pixels in view

Note: The blue line is the experimental data plotted

The red line is the distance estimate equation