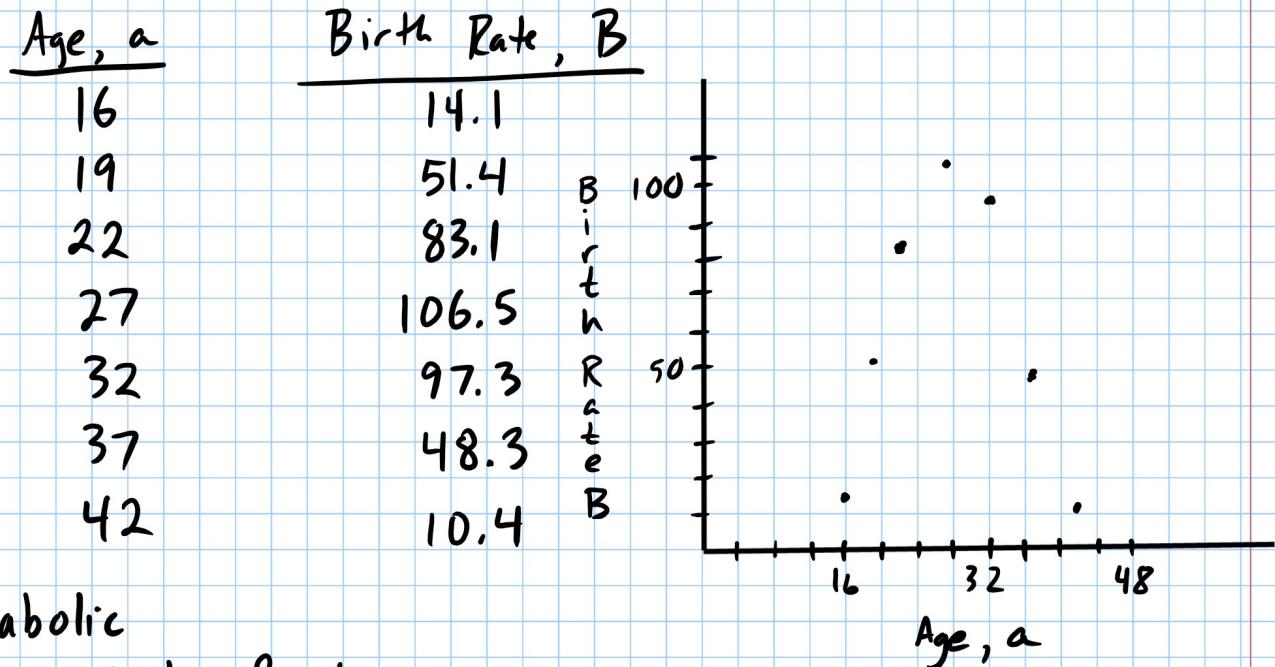


## Quadratic and Cubic Curve Fitting

The following data represent the birth rate (births per 1000 population) for women whose age is  $a$ , in 2012.



Looks parabolic

↳ quadratic function

$$y = -0.547x^2 + 31.19x - 342.22$$

$$R^2 = 0.963 \Rightarrow R = 0.981$$

- ② Temperature ( $^{\circ}\text{F}$ ) in Kansas City, Missouri,  $x$  hrs after midnight on 4/15/14

$\frac{x}{3}$	I
3	36.1
6	32
9	39
12	46.2
15	52
18	55
21	52
24	48.9