





(1,1) (2,3) (4,3)

$$y = ax^2 + bx + c$$

$$\begin{aligned} 1 &= a + b + c \\ 3 &= 4a + 2b + c \\ 3 &= 16a + 4b + c \end{aligned}$$

$$\begin{aligned} 1 &= a + b + c \\ -3 &= 4a + 2b + c \\ \hline -2 &= -3a - b \end{aligned}$$

$$\begin{aligned} 3 &= 4a + 2b + c \\ -3 &= 16a + 4b + c \\ \hline 0 &= -12a - 2b \end{aligned}$$

$$\begin{aligned} 2(-2 &= -3a - b) \\ 0 &= -12a - 2b \end{aligned}$$

$$\begin{aligned} 4 &= 6a + 2b \\ 0 &= -12a - 2b \end{aligned}$$

$$\frac{4}{6} = \frac{-6a}{-6}$$

$$\frac{2}{3} = a$$

$$-.67 = a$$

$$y = 10.01x^2 - 6.67x + 4.01$$

$$\begin{aligned} 4 &= 6a + 2b \\ +x \cdot 0.2 &+ x \cdot 0.2 + 2b \\ \hline 8.02 &= 2b \\ \frac{8.02}{2} &= \frac{2b}{2} \\ 4.01 &= b \end{aligned}$$

$$\begin{aligned} a &= -.67 \\ b &= 4.01 \\ c &= 2.34 \end{aligned}$$

$$\begin{aligned} 0 &= 12a + 2b \\ -12a &= -12a - 2b \\ \hline 0 &= -2b \\ \frac{0}{-2} &= \frac{-2b}{-2} \\ 0 &= b \end{aligned}$$

$$\begin{aligned} a &= -.67 \\ b &= 4.01 \\ c &= -2.34 \end{aligned}$$

$$y = -.67x^2 + 4.01x - 2.34$$

PROCESS:

① FIND 3 POINTS

② PLUG X & y VALUES INTO
 $y = ax^2 + bx + c$

③ SOLVE SYSTEM USING ALGEBRA
(ELIMINATE 'C' TO GET TWO EQUATIONS
WITH TWO VARIABLES, AND GO FROM THERE)

④ ROUND TO HUNDREDTHS