



$$\begin{aligned}
y &= -(x - 10)^{2} + 2 \\
y &= -(x - xc)^{2} + 2 \\
-1 &= -(3 - xc)^{2} + 2 \\
+3 &= (3 - xc)^{2} + 3 = 9 - 6xc + xc^{2} \\
x_{c}^{7} - 6xc + 6 &= 0 \\
x_{c} &= 4173
\end{aligned}$$