

Maxima and minima

Fill in the blanks:

1. The point of local minima of the function $f(x) = (x-1)^2$ is.....
2. If $f(x) = 3x^4 + 4x^3 - 12x^2 + 12$ has local maxima at $x=0$, then the maximum value of $f(x) =$
3. The absolute maximum value of the function $f(x) = 2x^3 - 15x^2 + 36x + 1$ on interval $[1, 5]$ is
4. An Apache helicopter of enemy is flying along the curve given by $y = x^2 + 7$. A soldier, placed at $(3, 7)$, wants to shoot down the helicopter when it is nearest to him. The nearest distance is
5. Critical point/points of the function $f(x) = x^2 - 2x + 1$ is