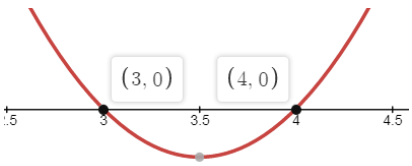
Solving Quadratic Inequations

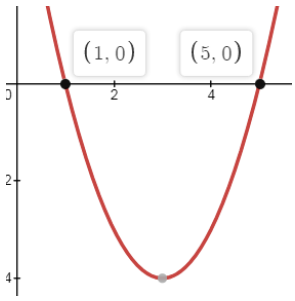
1. For each of the graphs, $y = f(x)$, below find where

i) $f(x) < 0$ ii. $f(x) \geq 0$

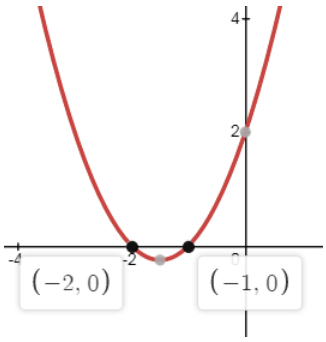
a.



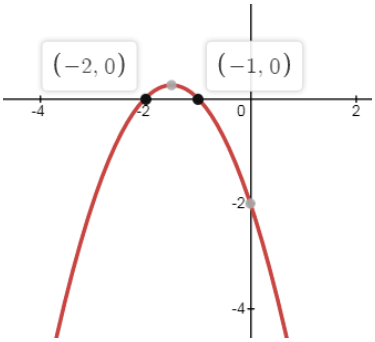
b.



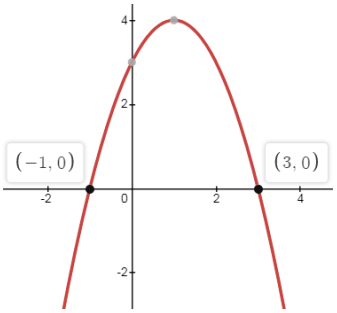
c.



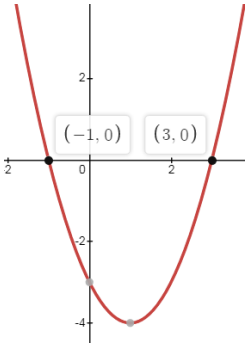
d.



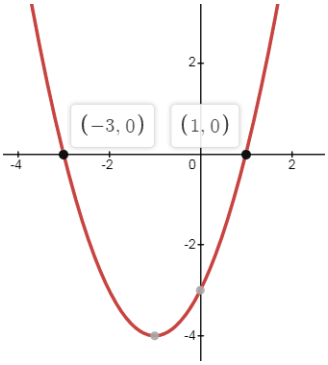
e.



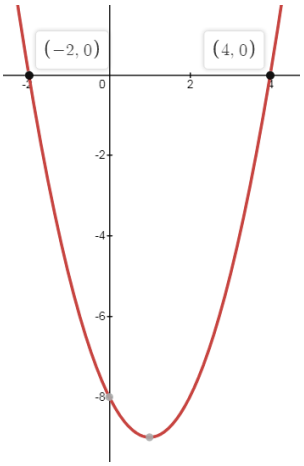
f.



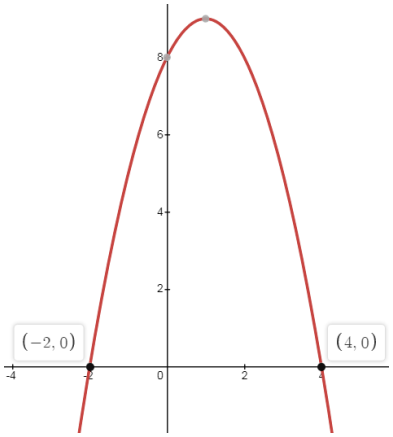
g.



h.



i.



2. Solve:

a. $(2x+3)(x+4) \leq 0$ b. $(2x-3)(x-4) \leq 0$ c. $(2x+1)(3x-4) \geq 0$

d. $-(3x+1)(x+2) > 0$ e. $-(2x+3)(x+8) < 0$ f. $(3x+7)(3-2x) > 0$

3. Solve:

a. $x^2 - 8x + 12 \geq 0$ b. $x^2 - x - 20 < 0$ c. $12 - x - x^2 \leq 0$

d. $2x^2 + 7x + 3 > 0$ e. $3x^2 + 11x - 4 \leq 0$ f. $9x - 4 - 2x^2 > 0$