Inverse of Quadratic Function

Version 1

Direction: Find the inverse of each quadratic function. Show all your work in the space provided.

1)
$$f(x) = x^2 - 2$$
 for $x < 0$

2)
$$f(x) = -x^2 - 2$$
 for $x \ge 0$

3)
$$f(x) = x^2 + 6x + 4$$
 for $x < -3$

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$$f(x) = x^2 - 2$$
 for $x < 0$

$$f^{-1}(x) = -\sqrt{x+2}$$
 for $x > -2$

2)
$$f(x) = -x^2 - 2$$
 for $x \ge 0$

$$f^{-1}(x) = \sqrt{-x-2} \ for \ x \le -2$$

3)
$$f(x) = x^2 + 6x + 4$$
 for $x < -3$

$$f^{-1}(x) = -3 - \sqrt{x+5}$$
 for $x > -5$