Name:
Group 1
Result:

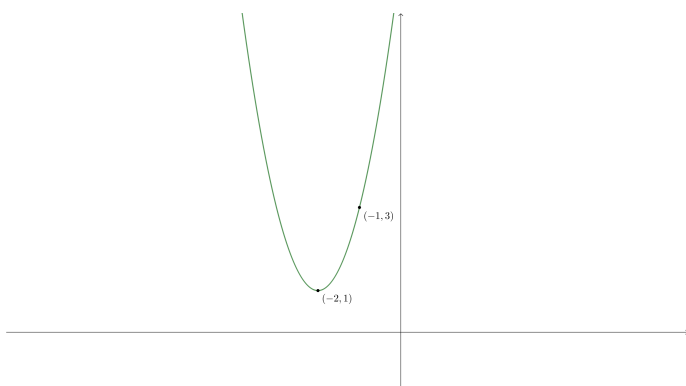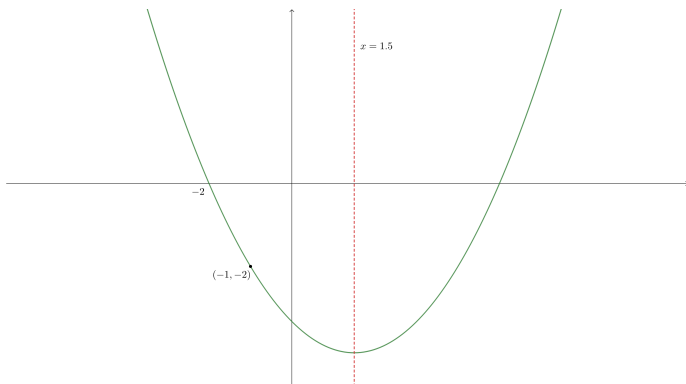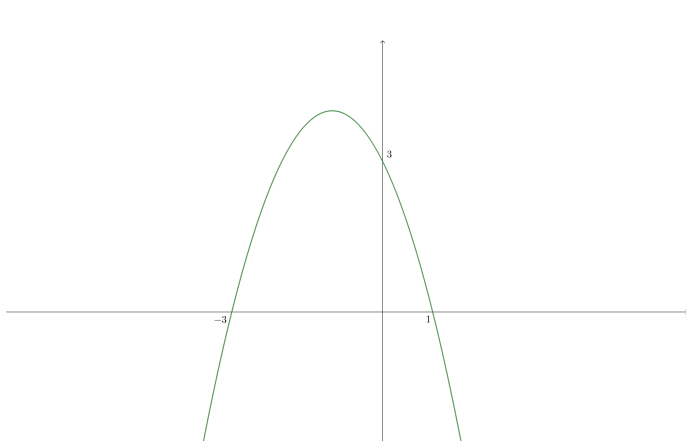**1.** Sketch the graphs of the following functions: *(6 points)*

$y = \frac{1}{8}(x - 4)^2 + 1$

$y = x^2 - 2x - 8$

$y = \frac{1}{3}(x - 1)(x + 6)$

2. Find the equations of the quadratic functions given their graphs: *(6 points)*

3. Solve the following equations: *(4 points)*

a) $(x^2 + 2)^2 - 7(x^2 + 2) + 6 = 0$

b) $x - 6\sqrt{x - 2} + 6 = 0$