

Name: _____

Date: _____

HW # 11a: Algebra 1 - Standard 6 - Solve Equations with Absolute Value

5 points

Write and solve an absolute value equation for each. Show work needed to justify answers.

- 19. ENGINEERING** *Tolerance* is an allowance made for imperfections in a manufactured object. The manufacturer of an oven specifies a temperature tolerance of $\pm 15^\circ\text{F}$. This means that the temperature inside the oven will be within 15°F of the temperature to which it is set. Write and solve an absolute value equation to find the maximum and minimum temperatures inside the oven when the thermostat is set to 400°F .

- 20. POLLS** Candidate A and Candidate B are running for mayor. A poll was taken to determine which candidate would likely win the election. The poll is accurate within $\pm 5\%$. Write and solve an absolute value equation to find the maximum and minimum percent of voters who will vote for Candidate A if 38% of the voters in the poll voted for Candidate A.

Write an equation involving absolute value for each graph.

