Integrated Honors Name: _____

Absolute Value Equations/Inequalities HW

Write each statement as an absolute value equation or inequality

1.) u is 5 units from -3

2.) v is at most 7 units from 18

For each problem:

(a) Solve the equation or inequality. Write the solution in inequality notation and in interval notation, when appropriate.

(b) Graph the solution.

3.) $3|h+2|=15$

4.) $|2x-17|<11$

5.) $\sqrt{x^2}>3$

6.) $0<|x-5|\le 2$

7.) $-5|2x|<30$

8.) $\sqrt{(x-4)^2}=22$

9.) The daily production P in an automobile assembly plant is always within 20 units of 500 units. Write the daily production as an absolute value inequality, then solve to find the range of daily productions possible.