## Honors Algebra 2

Unit 4b (Part 2) Test Review

Solve the following equation or inequality. Write answers in interval notation for the inequalities.

1. $|1-x|=2 x$
2. $3|5 x-5|+1 \geq 10$
3. $2|-2 x+5|+3=17$
4. $3+2|x-3|=7$
5. $-2|x+3| \geq-12$
6. $2|3 x-1|+8<4$
7. $|2 x+2|=8$
8. $|2-3 x|-5 x>4$

Express the function graphed on the axes below as a piecewise function. State the Domain and Range.
9.


Graph the following function on the axes provided.
11.

$$
f(x)=\left\{\begin{array}{lll}
-2 x+1 & \text { for } & -4<x<1 \\
6 & \text { for } & 1<x<4
\end{array}\right.
$$


12.

$$
f(x)=\left\{\begin{array}{lll}
-2 & \text { for } & x<-5 \\
x-4 & \text { for } & x>-1
\end{array}\right.
$$



