Honors Precalculus graphing problems. For each function, sketch the graph, state domain and range, find any intercepts, find any asymptotes, state symmetry.

1. $f\left(x\right)=x^{2}-4x+5$ 2. $f\left(x\right)=\left|x-3\right|+2$

3. $f\left(x\right)=\sqrt{x+3}$ 4. $f\left(x\right)=2\left(x-2\right)^{3}+1$

5. $f\left(x\right)=\left\{\begin{array}{c}2-x if x\leq 0\\1-x^{2} if x>0 \end{array}\right.$ 6. $f\left(x\right)=\frac{2x}{3x+4}$

7. $f\left(x\right)=\frac{2x}{x^{2}-4}$ 8. $f\left(x\right)=e^{x-2}+1$

9. $f\left(x\right)=ln\left(x+3\right)$ 10. $f\left(x\right)=2^{x}+3$