Name: $\qquad$

1. $2 x+h$
2. 644
3. 6
4. $\frac{4}{9}$
5. Domain $=[-8,7]$

Range $=[3,12]$
6. $y=\frac{4}{9}(x-3)^{2}+1$
7. $\left(-\frac{1}{4},-16\right)$ and $(1,4)$
8. $52.5 t+395$
9. All $x$ such that $f(x)>0:(-2,3) \cup(3, \infty)$

All $x$ such that $f(x)<0:(-\infty,-2)$
10. Speed of the current $=3.5 \mathrm{ft} / \mathrm{min}$

Her rate in still water $=42.5 \mathrm{ft} / \mathrm{min}$

