## Algebra I Worksheet \#5 Unit 8 page 1

Jane walks for $\mathbf{1}$ minute at a constant speed of $\mathbf{4}$ feet per second. Let t represent her walking time (in seconds) and $d(t)$ represent the distance she has walked (in feet). Answer each of the following. Show your process neatly organized.

1. Make a table giving $t$ and $d(t)$ every 10 seconds from $t=0$ to $t=60$.
2. Write an equation giving $d(t)$ in terms of $t$.
3. Write an inequality to describe the domain of function d. $\qquad$
4. Evaluate d(20). What does d(20) represent in terms of the problem?
5. Graph function d .

$\qquad$
6. Write an inequality to describe the range of function d . $\qquad$
7. If $d(t)=20$, then find the value of $t$. Describe what this value of $t$ represents in terms of the problem.

## Algebra I Worksheet \#5 Unit 8 page 2

Harry bikes for 2 hours at a constant speed of 12 miles per hour. Let $t$ represent his biking time (in hours) and $\mathrm{D}(\mathrm{t})$ represent the distance he has gone (in miles). Answer each of the following. Show your process neatly organized.
8. Make a table giving t and $\mathrm{D}(\mathrm{t})$ every half hour from $t=0$ to $t=2$.
10. Write an equation giving $D(t)$ in terms of $t$.
11. Write an inequality to describe the domain of function $D$. $\qquad$
13. Evaluate $\mathrm{D}(.75)$. What does $\mathrm{D}(.75)$ represent in terms of the problem?
9. Graph function D .

12. Write an inequality to describe the range of function $D$.
14. If $\mathrm{D}(\mathrm{t})=18$, then find the value of t . Describe what this value of $t$ represents in terms of the problem.

