Algebra 1: Unit 4: Linear Functions
4.1.4 Matching Motion Representations

Name: $\qquad$
Date: $\qquad$ Partners: $\qquad$

1. Caroline started 5 feet from the motion detector and walked away at a constant rate of 1 foot per second.

Graph:
$\square$
Function:


Rate $\qquad$
Start Distance $\qquad$
2. Kevin started 5 feet from the motion detector and walked toward it at a constant rate of 1 foot every 2 seconds.

Graph:


Function:


Rate $\qquad$

Start Distance $\qquad$
$\qquad$ Page 2
3. Carlos started in front of the motion detector and walked away at a constant rate of 5 feet per second.

Graph:


Rate $\qquad$

Start Distance $\qquad$

Table:

4. Kendra started 5 feet from the motion detector and didn't move.

Graph:
$\square$

Function:


Rate $\qquad$
Start Distance $\qquad$

Table:
$\square$
$\qquad$ Page 3
5. Kenny started 20 feet from the motion detector and walked toward it at a constant rate of 5 feet per sec.

Graph:


Function:


Rate $\qquad$
Start Distance $\qquad$
6. Karen started 1 foot from the motion detector and walked away from it at a constant 3 feet per second.

Graph:


Function:


Rate

Start Distance $\qquad$
$\qquad$

Table:


| $f(x)=5+1 x$ <br> $x$ is time in seconds <br> $f(x)$ is distance in feet | $\begin{gathered} f(x)=20-5 x \\ x \text { is time in seconds } \\ f(x) \text { is distance in feet } \end{gathered}$ | $f(x)=5+0 x$ <br> $x$ is time in seconds <br> $f(x)$ is distance in feet |
| :---: | :---: | :---: |
| $f(x)=5-\frac{1}{2} x$ <br> $x$ is time in seconds <br> $f(x)$ is distance in feet | $f(x)=1+3 x$ <br> $x$ is time in seconds $f(x)$ is distance in feet | $f(x)=0+5 x$ <br> $x$ is time in seconds <br> $f(x)$ is distance in feet |
| $f(x)=5+1 x$ <br> $x$ is time in seconds <br> $f(x)$ is distance in feet | $f(x)=20-5 x$ <br> $x$ is time in seconds <br> $f(x)$ is distance in feet | $f(x)=5+0 x$ <br> $x$ is time in seconds <br> $f(x)$ is distance in feet |
| $f(x)=5-\frac{1}{2} x$ <br> $x$ is time in seconds <br> $f(x)$ is distance in feet | $f(x)=1+3 x$ <br> $x$ is time in seconds <br> $f(x)$ is distance in feet | $f(x)=0+5 x$ <br> $x$ is time in seconds <br> $f(x)$ is distance in feet |


| $x$, in sec | $f(x)$, in ft |
| :---: | :---: |
| 0 | 5 |
| 1 | 6 |
| 2 | 7 |
| 3 | 8 |
| 4 | 9 |


| $x$, in sec | $f(x)$, in ft |
| :---: | :---: |
| 0 | 5 |
| 1 | 4.5 |
| 2 | 4 |
| 3 | 3.5 |
| 4 | 3 |


| $x$, in sec | $f(x)$, in ft |
| :---: | :---: |
| 0 | 0 |
| 1 | 5 |
| 2 | 10 |
| 3 | 15 |
| 4 | 20 |


| $x$, in sec | $f(x)$, in ft |
| :---: | :---: |
| 0 | 5 |
| 1 | 5 |
| 2 | 5 |
| 3 | 5 |
| 4 | 5 |


| $x$, in sec | $f(x)$, in ft |
| :---: | :---: |
| 0 | 20 |
| 1 | 15 |
| 2 | 10 |
| 3 | 5 |
| 4 | 0 |


| $x$, in sec | $f(x)$, in ft |
| :---: | :---: |
| 0 | 1 |
| 1 | 4 |
| 2 | 7 |
| 3 | 10 |
| 4 | 13 |


| $x$, in sec | $f(x)$, in ft |
| :---: | :---: |
| 0 | 5 |
| 1 | 6 |
| 2 | 7 |
| 3 | 8 |
| 4 | 9 |


| $x$, in sec | $f(x)$, in $f t$ |
| :---: | :---: |
| 0 | 5 |
| 1 | 4.5 |
| 2 | 4 |
| 3 | 3.5 |
| 4 | 3 |


| $x$, in sec | $f(x)$, in ft |
| :---: | :---: |
| 0 | 0 |
| 1 | 5 |
| 2 | 10 |
| 3 | 15 |
| 4 | 20 |


| $x$, in sec | $f(x)$, in ft |
| :---: | :---: |
| 0 | 5 |
| 1 | 5 |
| 2 | 5 |
| 3 | 5 |
| 4 | 5 |


| $x$, in sec | $f(x)$, in ft |
| :---: | :---: |
| 0 | 20 |
| 1 | 15 |
| 2 | 10 |
| 3 | 5 |
| 4 | 0 |


| $x$, in sec | $f(x)$, in ft |
| :---: | :---: |
| 0 | 1 |
| 1 | 4 |
| 2 | 7 |
| 3 | 10 |
| 4 | 13 |








