## Linear Station 1

1. What scenario could be modeled by the graph below?

a. The number of pounds of apples, $y$, minus two times the number of pounds of oranges, $x$, is at most 5 .
b. The number of pounds of apples, $y$, minus half the number of pounds of oranges, $x$, is at most 5 .
c. The number of pounds of apples, $y$, plus two times the number of pounds of oranges, $x$, is at most 5 .
2. The number of pounds of apples, $v$, plus half the number of pounds of oranges, $x$, is at most 5 .

$$
y \leq-\frac{2}{1} x+5 \int 2 x+y \leq 5
$$

2. Which equation is the slope-intercept form of $y+2(x+5)=4 x+5$
a. $y=2 x+20$
b. $y=-4 x+5$
$y+2 x+10=4 x+5$
$-2 x-10-2 x-10$
$y=2 x-5$
c. $y=2 x-5$
3. Mario compared the slope of the function graphed below to the slope of a different function with an $x$-intercept of -2 and a y intercept of 1.

4. The average lifespan of an American woman has been tracked and is modeled by the equation $y=(.2 \lambda)+73$ where $y$ is the lifespan and $t$ is the years since 1960. What does the slope mean in context?

- The Lifespan of a woman goes up by .2 yearsfor every or The lifespan goes upby lyear for every s years since 1960.

5. Two boys, Shawn and Curtis, went for a walk. Shawn began walking 20 seconds earlier than Curtis.

- Shawn walked at a speed of 5 feet per second.
- Curtis walked at a speed of 6 feet per second. $\quad y=6 x$

For how many seconds had Shawn been walking at the moment when the two boys had walked exactly the same distance?

$$
\begin{aligned}
& 5 x+100=6 x \\
&-5 x \\
& x=100
\end{aligned} \quad 100 \text { seconds }
$$

