

## Pick up from the Stool

1. The start-up cost to join iTunes music is \$7.95 plus \$0.95 per song downloaded. If Will spent \$26, write and solve a linear equation to find how many songs he downloaded.

$x = \text{Songs}$

$m = 0.95 \quad b = 7.95$

$y = mx + b$

$y = 0.95x + 7.95$

$$\begin{array}{r} 26 = 0.95x + 7.95 \\ -7.95 \quad \quad -7.95 \\ \hline \end{array}$$

$$\begin{array}{r} 18.05 = 0.95x \\ \hline 0.95 \quad \quad 0.95 \end{array}$$

$x = 19 \text{ Songs}$

2. At a pet store, it costs \$5 to wash a cat and \$7.50 to wash a dog. Last week, the store made \$60 from washing cats and dogs. If 6 cats were washed, write and solve a linear equation to find how many dogs were washed.

Cat	Dog	Total	$x = \# \text{ of dogs}$
\$5	\$7.50	\$60	

$$\begin{array}{r} 6 \quad \quad x \\ \hline 30 + 7.50x = 60 \end{array}$$

$y = 7.50x + 30$

$$\begin{array}{r} 60 = 7.50x + 30 \\ -30 \quad \quad -30 \\ \hline \end{array}$$

$$\begin{array}{r} 30 = 7.50x \\ \hline 7.50 \quad \quad 7.50 \end{array}$$

$x = 4$

$4 \text{ dogs}$

# **Linear Application STATIONS**

- 1. Annotate and solve the problem at the station where your group starts**
- 2. Move with your group through the stations and use a post-it note for comments on other groups' work**