

Name 4.7

Predict with Linear Models

Alg I

Zero of a function: an x-value for which $f(x)=0$, also the x-intercept.

Example: $f(x)=2x-4$ $f(x)=0$

$$\begin{array}{r} 0 = 2x - 4 \\ +4 \quad +4 \\ \hline 4 = 2x \\ \frac{4}{2} = \frac{2x}{2} \end{array}$$

$$x = 2$$

The zero of $f(x)=2x-4$ is 2.

Example 2: $y = -1.23x + 14$

$$\begin{array}{r} 0 = -1.23x + 14 \\ -14 \quad -14 \\ \hline -14 = -1.23x \\ \frac{-14}{-1.23} = \frac{-1.23x}{-1.23} \\ x = 11.4 \end{array}$$

* The function has a negative slope. The number of jet boats is decreasing. There will be no jet boats purchased 11.4 years after 1995, or in 2006.

I can find the zero of a function.

Ch. 4 Quiz

* Complete Skills practice pg. 279, # 7-12