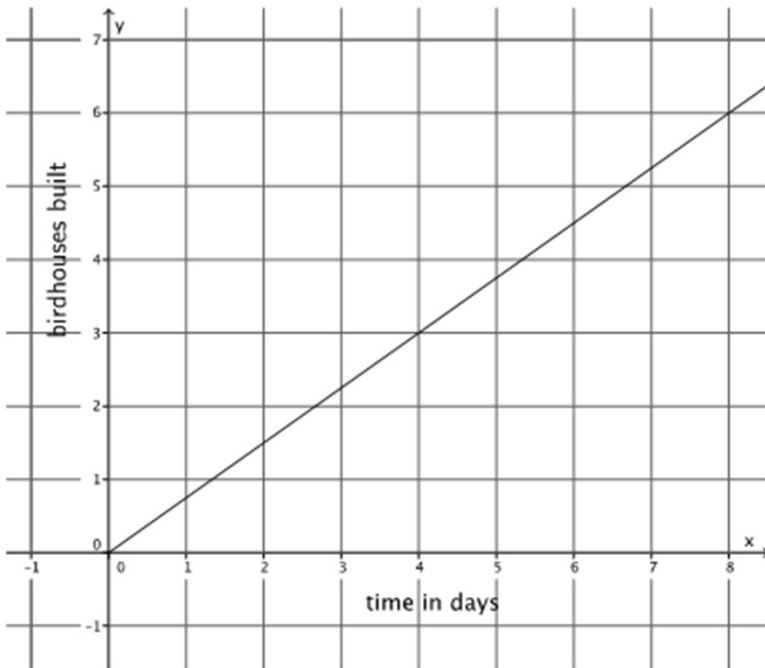


## Constant Rate and Linear Equation

1) a) Phil can build 3 birdhouses in 5 days. Assuming he builds birdhouses at a constant rate, write the linear equation that represents the situation.

b) The figure represents Karl's constant rate of building the same kind of birdhouses.

Who builds birdhouses faster? Explain.



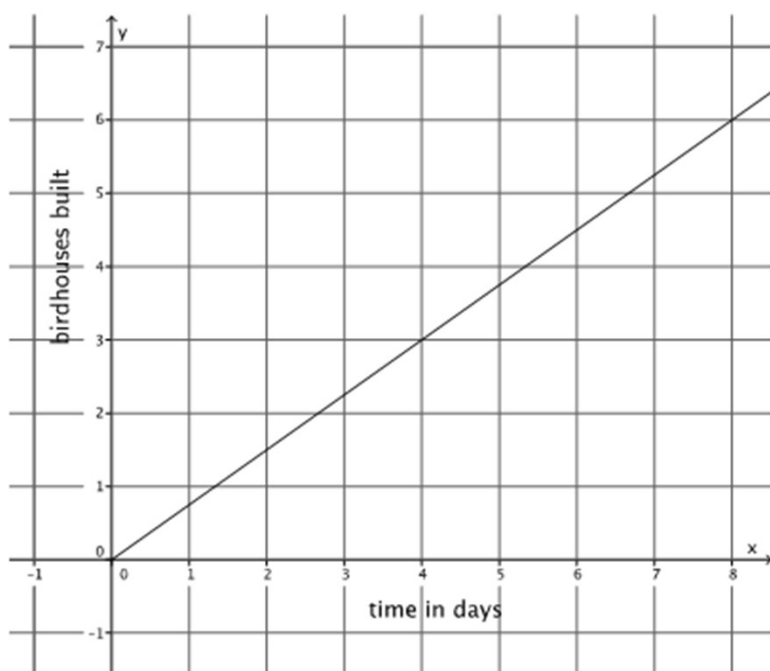
## Constant Rate and Linear Equation

1) a) Phil can build 3 birdhouses in 5 days. Assuming he builds birdhouses at a constant rate, write the linear equation that represents the situation.

Let  $y$  represent the total number of birdhouses Phil can build in  $x$  days. We can write  $\frac{y}{x} = \frac{3}{5}$  and  $y = \frac{3}{5}x$ .

b) The figure represents Karl's constant rate of building the same kind of birdhouses.

Who builds birdhouses faster? Explain.



Karl can build birdhouses faster. The slope of the graph for Karl is  $\frac{3}{4}$ , and the slope or rate of change for Phil is  $\frac{3}{5}$ . When you compare the slopes,  $\frac{3}{4} > \frac{3}{5}$ .