

# 7.RP.2: Worksheet

## Solutions

- Write an equation that shows there are 8 cars for every truck in Los Angeles.  $c = 8t$
- Do the points (3, 2) and (18, 12) represent a proportional relationship? Why or why not? Yes, they do. If we graph 'em, they both sit on the straight line  $y = 0.5x$ , which passes through the origin.
- What's the unit rate in the graph in Figure 1? What point represents this?

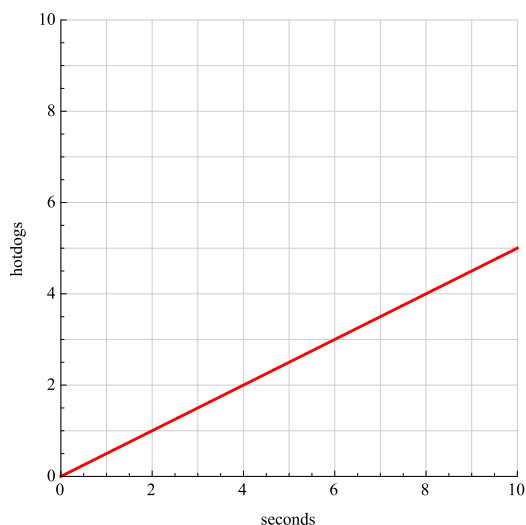


Figure 1.

The unit rate is 0.5 or  $\frac{1}{2}$  hotdogs per second, which we get from the point (1, 0.5).

- Does the following table show a proportional relationship between birds and cats?

Birds	7	21	35	49
Cats	1	3	6	9

Nope. The first and second ratios are equivalent, but the last two aren't.

- Write an equation that shows there are five times more polar bears than grizzly bears.  $p = 5g$
- In the equation  $2y = 18x$ , what's the constant of proportionality? The constant of proportionality is 9, since the equation simplifies to  $y = 9x$ .

- Does the following table show a proportional relationship between Orcs and Elves? If so, what is the ratio of Orcs to Elves?

Orcs	1	2	5	11
Elves	3	6	15	33

Yep, it sure does. The ratio of Orcs to Elves is 1:3 throughout the table.

- The following table shows how much Big Al gets paid at his job. What's his hourly rate?

Hours	5	8	9	20
Dollars	62.50	100	112.50	250

Big Al gets paid \$12.50 per hour.

- Figure 2 shows the number of cicadas James can catch every hour. What does the point (4, 14) tell us?

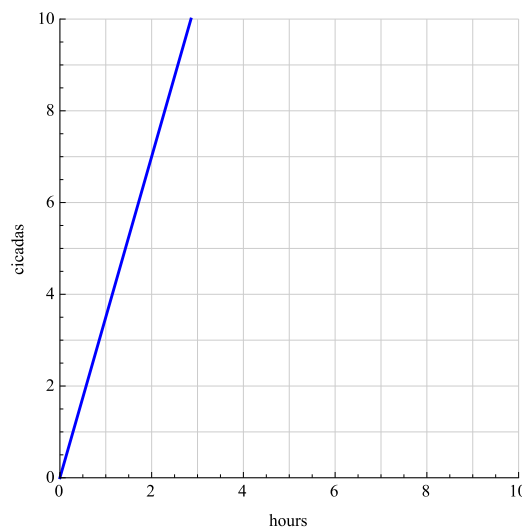


Figure 2.

James can catch 14 cicadas in 4 hours.

- What's James' unit rate according to Figure 2? His unit rate is 3.5 cicadas per hour.