

Main Concept

Process:

1. Identify the **quantity you know**. Write it down, including the **units**.
2. Write down the **rate** as an **equation**.
3. Write the rate as a fraction so that you can **cancel the units** in the quantity.
4. Multiply the quantity and the rate, and simplify.
5. **Check**. Do the units in your result actually answer the question?

I make 9 dollars per hour. How much money will I make in 18 hours?

If I can read 24 pages per hour, how many pages can I read in 6 hours?

How long will it take me to walk 125 feet if I walk at a speed of 3 feet per second?

If I type 35 words per minute, how long will it take me to type a 735 word essay?

If I send 42 texts in 3 hours, how many will I send in 8 hours (if I don't get my phone taken away)?

Do Now: Unit Rates Practice

<p>Sergio swam 20 laps in 8 minutes. Karen swam 28 laps in 10 minutes. Who is a faster swimmer?</p>	<p>Which is a better deal: 90 fun-size Snickers for 4 dollars, or 70 fun-size Snickers for 3 dollars?</p>	<p>Anthony's hair grew 4 inches in 6 months. Sal's hair grew 5 inches in 10 months. Whose hair grew faster?</p>
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Working with Unit Rates

- 1.** My dad is driving down highway 30 at 65 miles per hour. How far will he go in 4 hours?

- 2.** My dad is driving down highway 30 at 65 miles per hour. How long will it take him to drive 403 miles?

- 3.** At my new job, I make 70 dollars per day. How long will it take me to earn 385 dollars?

- 4.** At my new job, I make 70 dollars per day. How much money will I make in 7 days?

- 5.** The orange tree I planted in my yard grew 2 inches in 4 months.
 - a.** If the tree continues to grow at the same rate, how long will it take to grow 12 inches?

 - b.** If the tree continues to grow at the same rate, how much will it grow in 35 months?

- 6.** In the latest MC hit single, he raps out 720 words in 3 minutes.
 - a.** If MC always raps at the same rate, how many words will he say in 8 minutes?

 - b.** If MC always raps at the same rate, how long will it take him to say 1,080 words?