Classwork

Mathematical Modeling Exercises

1. At Fun Burger, the Burger Master can make hamburgers at a rate of $4$ burgers/minute. In order to address the heavy volume of customers, he needs to continue at this rate for $30$ minutes. If he continues to make hamburgers at this pace, how many hamburgers will the Burger Master make in $30$ minutes?
2. Chandra is an editor at the New York Gazette. Her job is to read each article before it is printed in the newspaper. If Chandra can read $10$ words/second, how many words can she read in $60$ seconds?

Exercises

Use the table below to write down your work and answers for the stations.

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Lesson Summary

We can convert measurement units using rates. The information can be used to further interpret the problem. Here is an example:

$$\left(5\frac{gal}{min}\right)∙\left(10 min\right)=\frac{5 gal}{1 min }∙10 min =50 gal$$

Problem Set

1. Emma earns $\$17$ per hour tutoring student-athletes at Brooklyn University.
	1. If Emma tutored for $12$ hours this month, how much money did she earn this month?
	2. If Emma tutored for $19.5$ hours last month, how much money did she earn last month?
2. The Piney Creek Swim Club is preparing for the opening day of the summer season. The pool holds $22,410$ gallons of water, and water is being pumped in at $540$ gallons per hour. The swim club has its first practice in $42$ hours. Will the pool be full in time? Explain your answer.