Lesson 23: Problem Solving Using Rates, Unit Rates, Conversions

Classwork

Example 1: Fresh-Cut Grass

Suppose that on a Saturday morning you can cut lawns in hours, and your friend can cut lawns in hours. Who is cutting lawns at a faster rate?

|  |  |
| --- | --- |
|  |  |

Example 2: Restaurant Advertising

|  |  |
| --- | --- |
|  |  |

]

Example 3: Survival of the Fittest

|  |  |
| --- | --- |
|  |  |

Example 4: Flying Fingers

|  |  |
| --- | --- |
|  |  |

Problem Set

1. Who walks at a faster rate: someone who walks 60 feet in 10 seconds or someone who walks 42 feet in 6 seconds?
2. Who walks at a faster rate: someone who walks 60 feet in 10 seconds or someone who takes 5 seconds to walk 25 feet? Review the lesson summary before answering!
3. Which parachute has a slower decent: a red parachute that falls 10 feet in 4 seconds or a blue parachute that falls 12 feet in 6 seconds?
4. During the winter of 2012-2013, Buffalo, New York received 22 inches of snow in 12 hours. Oswego, New York received 31 inches of snow over a 15 hour period. Which city had a heavier snowfall rate? Round your answers to the nearest hundredth.
5. A striped marlin can swim at a rate of 70 miles per hour. Is this a faster or slower rate than a sailfish, which takes 30 minutes to swim 40 miles?
6. One math student, John, can solve these 6 math problems in 20 minutes while another student, Juaquine, can solve them at a rate of 1 problem per 4 minutes. Who works faster?