|  |  |  |  |
| --- | --- | --- | --- |
| **Representing Multiplicative Relationships as Rates** | | | |
| Solves unit rate problems concretely and pictorially  It takes 6 apples to make an apple pie. How many apples are needed to make 9 pies?    “I used a number line to show how the number of apples increases as the number of pies increases.” | Uses various tools to solve multiple unit rate problems.  Kiran and Simi walk 30 km. Kiran walks 5 km per hour and Simi walks 6 km in one hour. How long will it take each person to walk 30 km?    “I used a ratio table. It makes it easy to make comparisons and to solve the problem.” | Uses inverse relationships to record and solve unit rate problems  Marc paddled a canoe 10 km in 150 minutes. At what rate did he paddle?    “10 km × **rate per minute** = 150 minutes I thought division: 150 ÷ 10 = ?  I know 10 × **15** = 150.  So, Marc paddled at the  **rate of 15 km per minute.”** | Flexibly applies multiplicative reasoning to solve different types of unit rate problems.  Shila cuts lawns in the neighborhood and charges $7/hour. If Shila works for 6 hours each week, how many hours will Shila need to work to make $168?    “I know that Shila makes $42 a week (7 × 6 = 42). From the ratio table, Shila will make $168 dollars after 24 hours of work.” |
| **Observations/Documentation** | | | |
|  |  |  |  |