U3D9 Warm Up:
Lake Ontario is four times as deep as Lake Erie. The sum of their depths is 300 m . What is the depth of each lake? Set up and solve the "Number Story Question".
"Unit Rate" Story Questions

|  | Examples |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Unit Rate $\Delta / ■$ | Value/Coin | Km/h | Points/Goal | Cost(\$)/Ticket | Cost(\$)/kg |
| Number of ■ | Number of <br> Coins | Number of <br> Hours | Number of <br> Goals | Number of <br> Tickets | Number of <br> kg |
| Total $\Delta$ | Total Value | Total km | Total Points | Total Cost(\$) | Total Cost(\$) |

Example 1: Write an equation using only one variable to represent each unit rate situation. Use a unit rate chart to help you. If you do not use a chart, you must write a let statement to represent the variable chosen. Set-up and solve each of the following.
a) Ben plays on the $\mathrm{W}-\mathrm{O}$ basketball team. He gets 2 points if he gets a basket inside the three-point line and 3 points if he gets a basket outside the three-point line. He scored 61 baskets giving him 140 points in the season. How many 2-point and 3-point shots did he make in his season?

|  | Inside | Outside | TOTAL |
| :--- | :--- | :--- | :--- |
| Points/basket |  |  |  |
| Number of <br> baskets |  |  |  |
| Total Points |  |  |  |

b) You make a new coffee mixture that combines Coffee A and Coffee B that costs $\$ 5.56 / \mathrm{lb}$. If Coffee A costs $\$ 6.15 / \mathrm{lb}$ and Coffee B costs $\$ 3.20 / \mathrm{lb}$, how much of each kind of Coffee are needed to make up a 15 pound mixture?

c) Noah had $\$ 4.25$ in nickels and dimes. If he has 54 coins altogether, how many of each does he have?

|  |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

