

Monday October 5, 2015

**Learning Target:** We are learning to write an equation from a verbal scenario and then solve

**Example #1:**

The table shows the number of points scored by three players in last night's basketball game. If Gil and Darby scored the same number of points, how many points did

Josiah score? **TEKS 8.8(C)** \_\_\_\_\_

Player	Points
Josiah	$x$
Darby	$2x + 8$
Gil	$3x - 4$

**Example #2:**

A wireless company offers two cell phone plans. Plan A charges \$24.95 per month plus \$0.10 per minute for calls. Plan B charges \$19.95 per month plus \$0.20 per minute. When will the plans cost the same?

**Example #3:**

First Rate Rental charges \$40 a day plus \$0.25 per mile. Star Rental charges \$25 a day plus \$0.45 per mile. If Stella and John went to the different companies and paid the same amount, how much did they pay in total?

**Example #4:**

The school has budgeted \$2,000 for an end-of-year party at the local park. The cost to rent the park shelter is \$150. How much can the student council spend per student on food if each of the 225 students receives a \$3.50 gift? Write and solve an equation to represent the real-world problem. (Example 4)

**Your Turn! Write an equation to represent each situation and then SOLVE the equation. Be sure to show and check your work.**

1. The table shows the numbers of students in each eighth grade homeroom at Lincoln High. If the total number of students in Homerooms A and B are equal to the total number of students in Homerooms C and D, how many students are in Homeroom A? **TEKS 8.8(C)**

Homeroom	Number of Students
A	$a$
B	$4(a - 3)$
C	15
D	$2a + 9$

2. Container A and container B have leaks. Container A has 800 ml of water, and is leaking 6 ml per minute. Container B has 1000 ml, and is leaking 10 ml per minute. How many minutes,  $m$ , will it take for the two containers to have the same amount of water?
3. The cost to purchase a song from iTunes is \$0.99 per song. To purchase a song from Napster, you must be a member. The Napster membership fee is \$10. In addition, each purchased song costs \$0.89. How many downloaded songs,  $d$ , must be purchased for the monthly price of Napster to be the same as iTunes?

4. Lennie makes \$55,000 and is receiving annual raises of \$2,500. Karl makes \$62,000, with annual raises of \$2,000. When Lennie and Karl make the same amount of money in a year, how much will they make?
5. The school has budgeted \$2,000 for an end-of-year party at the local park. The cost to rent the park shelter is \$150. How much can the student council spend per student on food if each of the 225 students receives a \$3.50 gift? Write and solve an equation to represent the real-world problem. (Example 4)

BONUS #1: Mr. Richards's class is holding a canned food drive for charity. Juliet collected 10 more cans than Rosana. Santiago collected twice as many cans as Juliet. If they collected 130 cans altogether, how many cans did Juliet collect? Write and solve an equation to represent the real-world problem. (Example 4)

Bonus #2: **PIZZA CRUST** Pepe's Pizza makes 52 pizza crusts the first week and 180 pizza crusts each subsequent week. Dianne's Delicatessen makes 26 pizza crusts the first week and 90 pizza crusts each subsequent week. In how many weeks will the total number of pizza crusts made by Pepe's Pizza equal twice the total number of pizza crusts made by Dianne's Delicatessen?