Writing Systems Worksheet

1) The perimeter of a rectangle deck is 175 feet. The length of the deck, *l*, is 6 feet longer than 2 times the width, *w*. Which system of equations can be solved to determine the length and width, in feet, of the deck?

   a) 2L + 2w = 175   b) 2L + 2w = 175   c) 2L + 2w = 175   d) 2L + 2w = 175
      L = 2 – 6w   L = 2w – 6   L = 6 – 2w   L = 6 + 2w

2) The Mendez family is going to the movies. Adult tickets cost $9 and children's tickets cost $6. There are 6 people in the family, and they spend a total of $48 on tickets. Which system of equations can be solved to determine a, the number of adult tickets, and c, the number of children's tickets?

   a) 9a + 6c = 48   b) 9a + 6c = 48   c) 6a + 9c = 48 d)   6a + 9c = 48
      a + c = 6   a – c = 6   a + c = 6   a – 6 = c

Write a system and solve for each problem below.

3) At the end of the 2015 baseball season, the New York Yankees and the Cincinnati Reds had won a total of 31 World Series. The Yankees had won 5.2 times as many World Series as the Reds. How many World Series did each team win?

Equation 1:	Solution:
Equation 2:	

4) A youth group and their leaders visited Mammoth Cave. Two adults and 5 students in one car paid $77 for the Grand Avenue Tour of the cave. Two adults and 7 students in a second van paid $95 for the same tour. Find the adult price and the student price of the tour.

Equation 1:

Equation 2:

Solution:

5) Neil has a total of twelve $5 and $10 bills in his wallet. He has 5 times as many $10 bills as $5 dollar bills. How many of each does he have?

Equation 1:

Equation 2:

Solution:

6) A play is being put on at the school. The cost of a student ticket is $5 and the cost of an adult ticket is $8. If 320 people go and $2,200 is made, how many students and how many adults went to the play?
Solution is an extension for this problem…

Equation 1:

Equation 2: