

Name: _____
Date: _____
Class: _____

Algebra
Unit 2
HW 2-5

- 1) Tanisha and Rebecca are signing up for new cellphone plans that only charge for the number of minutes and everything else is included in a monthly fee. Their plans are as follows:

Tanisha's plan: \$0.15 per minute used talking and a \$25 monthly fee.

Rebecca's Plan: \$0.10 per minute used talking and a \$18.50 monthly fee.

Will these two plans ever charge the exact same amount?

- 2) Find two consecutive even integers such that their sum is equal to the difference of three times the larger and two times the smaller.

- 3) In a small independent movie theater there are 93 seats in 3 rows. Each row has 2 more seats than the row in front of it. How many seats are in the middle row?

- 4) Three numbers which are every other even number (for example – 2, 6, 10) have the following true about them. If you double the sum of the first two it is 18 more than 3 times the largest. What are the 3 number?

5) Two numbers are used in the following problem. The 2nd number is 10 more than the first number. When you add the smaller number and half the larger number you get a number that is the same as 18 less than the total of these two numbers. What is the smaller of the two numbers?

6) There is a competition at the local movie theater for free movie tickets. You must guess all four employees' ages given a few clues. The first clue is that when added together, their ages total 106 years. Kirk is twice ten years less than the manager's age, Brian is 12 years younger than twice the manager's age, and Matt is 6 years older than half the manager's age. What are all four of their ages? It may help to set up four let statements, one for each employee (including the manager).

7) Solve: $14 + 2(6 - 4n) = 2n - 6(n - 4) + 35$