

Problem Set XIV

Problem 1 Decrypt the following problems (The same letters stand for the same digits, and different letters stand for different digits.):

$$BB + A + A = CCC$$

$$ODD + ODD = UNDO$$

Problem 2 Explain why the following puzzles cannot be solved (The same letter stand for the same digits, and different letters stand for different digits):

$$AHA + H = BEE$$

$$KATHRIN + BELLA = FRIENDS$$

$$BAT + RAT = CAT$$

Homework Set XIV

Problem 1 Decrypt the following problems (The same letters stand for the same digits, and different letters stand for different digits.):

$$\text{AHA} + \text{EHE} = \text{AHAH}$$

$$\text{ROSA} + \text{ROSA} = \text{OASIS}$$

Problem 2 Explain why the following puzzles cannot be solved (The same letters stand for the same digits, and different letters stand for different digits):

$$\text{COKE} + \text{CAKE} = \text{SOCIAL}$$

$$\text{TEE} + \text{ICE} = \text{NICE}$$

Challenge Problems

Problem 3 Look at the following encrypted puzzle:

$$\text{COW} + \text{COW} + \dots + \text{COW} = \text{HERD}.$$

What is the maximum possible number of “cows” in the “herd”? Give an example and explain why a larger number is not possible.

Problem 4 Decrypt

$$\text{SEND} + \text{MORE} = \text{MONEY}.$$

(The same letters stand for the same digits, and different letters stand for different digits.)