

EQUATIONS IN ONE VARIABLE

PROBLEM 3: THE PIGGY BANK

John has \$150.00 in his piggy bank and plans to add \$2.00 each week. Parneshia has \$200 in her piggy bank and plans to add \$6.00 dollars each week. After how many weeks will Parneshia have twice as much money as John?

REFERENCE: Mathematics Teaching in the Middle School, NCTM, Vol.2 No 6, May 1997, Menu of Problems.

PROBLEM 4: SWIM RECORDS

In 1988, the women's record for the 100-m freestyle in swimming was 54.73 seconds. It had been decreasing at a rate of 0.33 seconds a year. The men's record was 49.36 seconds and had been decreasing at 0.18 seconds a year. Assuming that these rates continue, after how many years will the records be the same? Do you think this will happen? Why or why not?

REFERENCE: UCSMP, Algebra, 1988.