

Linear Equations and Problem Solving  
Worksheet #2

Name \_\_\_\_\_

Date \_\_\_\_\_ Pd \_\_\_\_\_

1. Two people are running on the same running path. One person starts and runs at a rate of 18 feet per second. Twenty seconds later, the other person starts and runs at a rate of 20 feet per second. In how many seconds will they be running side-by-side?

2. From 1988 to 1989, the population of Colorado Springs increased by 5500 and that of Wichita increased by 4700. In 1989, the populations of Colorado springs and Wichita were 284,482 and 297,391, respectively. If the populations continue to increase at the same rates, when will the populations of the two cities be the same?

3. A page of a school yearbook is  $8\frac{1}{2}$  inches wide. The left and right margins are 1 inch and  $2\frac{1}{2}$  inches, respectively. The space between two pictures is  $\frac{1}{4}$  inch. How wide should each picture be to fit 3 across the page? (Draw a picture.)

4. You are designing the sidewall of a house with 3 windows, each 3 feet wide. There are 4 feet between each end window and an edge of the house. The width of the wall is 33 feet. You want the distance between the windows to be the same. How far apart should the windows be? (Draw a picture.)