

Writing & Solving Equations to Model Real World Situations Class Work

∞ DIRECTIONS: Work with your group to solve each problem. Be sure to write an equation or series of equation as a form of supporting your solution.

1. Paula has \$20 more than her friend Nancy has. Ned has \$5 less than twice the amount that Nancy has. Together, Paula, Nancy, and Ned have a total of \$87, which they are planning on using to take their other friend, Nolan, out to dinner with. How much money does Nancy have? What about Paula and Ned?

2. Rachel is building a pen for her new pet pig! She has 50 feet of fencing to work with. Rachel would like the length to be 2 feet more than double the width, and the width to be no less than 5 feet long. Determine the range of possible widths Rachel can use when designing the pen. Express your answer as a compound inequality, and explain the inequality via a short sentence.

3. Train A travels in the direct opposite of Train B at a constant speed that is 10mph slower than half the constant speed of Train B. After 2 hours, the fronts of each train are 205 miles apart. How fast is each train traveling?

***What do you believe to be the most important aspect of modeling and solving word problems??**