Algebra RH

Essential Question: How do we set up and solve word problems?

Do Now: Solve the following problems using any method. Show all work.

1. Twice a number decreased by 5 is 7. Find the number.

2. Fred saves $\frac{2}{3}$ as much as John. John saves 5 times as much as Mary. Together, all three save \$14.00. How much does each person save?

3. One number is 4 more than another number. Three times the larger number equals 4 times the smaller number. Find both numbers.

Problem Solving Method: An Algebraic Approach

- 1)
- 2)
- 3)
- 41

Examples: Work on a separate sheet of paper.

- 1. The length of a rectangle is 3 times its width. The perimeter is 50 feet. Find the length and width of the rectangle.
- 2. Thirty-five is 15 less than twice a number. Find the number.
- 3. Jerry's age is $\frac{1}{3}$ of Pete's age. The sum of their ages is 24 years. How old is each person?
- 4. A phone call costs \$0.80 for the first minute and \$0.25 for each additional minute. The total cost of the call is \$3.30. How long did the call last?
- 5. Kyle wants to cash his paycheck for an equal number of \$5, \$20 and \$50 dollar bills. How many of each kind of bill will he get if his check is \$450?
- 6. Brian has \$880 in his savings account. If he saves \$35 per week, how long will it take him to save \$2000?
- 7. The total cost of a sandwich, drink and an apple is \$3.50. The drink costs one and a half times as much as the apple. The sandwich costs \$2.00. What is the price of the drink and the apple?