

Math 70 Word Problems  
Chapter 2 Bittinger Text

Name: \_\_\_\_\_

**DIRECTIONS:** The problems on these pages provide a wide variety of word problems covered in chapter two of our Math 70 textbook. The first nine problems are for in-class instruction. Another nine problems following these are for independent practice.

1. STRICT TRANSLATION: Two fewer than ten times a number is seventy-eight. What is the number?

2. FINANCES: In New York City, taxis charge \$2.50 plus \$2.00 per mile for off-peak fares. How far can John travel for \$17.50 (assuming he is traveling at an off-peak time)?

3. RELATIONSHIPS BETWEEN TWO QUANTITIES: If a bird-watcher saw seventy-four birds in one day and saw four more in the morning than he did in the afternoon, how many birds did he see in the afternoon?

4. ANGLE PROBLEM: Two angles are supplementary. If one of these angles measures  $45^\circ$  less than twice the measure of its supplement, find the measure of each angle.

5. TRIANGLE PROBLEM: In a given triangle two of its angles are equal and the third is twice the size of the others. What are the measures of the three angles of this triangle?

6. CONSECUTIVE INTEGERS: If five times the lesser of two consecutive integers is added to three times the greater, the result is fifty-nine. What are the integers?

7. CONSECUTIVE INTEGERS: Find two consecutive odd integers such that twice the greater is seventeen more than the lesser.

8. GEOMETRY: The perimeter of a rectangle is 36 feet. Its length is two feet more than its width. Find the length and the width.

9. PARTS OF A WHOLE: A string that is 39 inches long is cut into 3 pieces. If the largest piece is three times as long as the smallest piece, and the medium-sized piece is 9 inches longer than the smallest piece, how long is each piece?

## ADDITIONAL PRACTICE

1. STRICT TRANSLATION: If four is added to a number and this sum is doubled, the result is one less than three times the number. What is the number?

2. FINANCES: Fine Line Trucks rents an 18-foot truck for \$42.00 plus 35 cents per mile. Judy needs a truck for one day to deliver a shipment of plants. How far can she drive and stay within a budget of \$70.00?

3. RELATIONSHIP BETWEEN TWO QUANTITIES: Mark is two years older than Joan. The sum of their ages is seventy years. Find the age of each.

4. ANGLE PROBLEM: Find the measure of an angle whose supplement measures ten times the measure of its complement.

5. TRIANGLE PROBLEM: In a given triangle, the largest angle is 3 times the size of the smallest angle, and the medium-sized angle is  $30^\circ$  larger than the smallest angle. What is the measure of each angle?

6. CONSECUTIVE INTEGERS: If two times the lesser of two consecutive integers is subtracted from five times the greater, the result is forty-four. What are the integers?

7. CONSECUTIVE INTEGERS: Find two consecutive even integers such that six times the smaller added to the larger gives a sum of eight-six.

8. GEOMETRY: The perimeter of a rectangle is 80 meters. Its length is 25 meters. Find the width.

9. PARTS OF A WHOLE: A woodworking project requires a piece of wood to be cut into three pieces. The longest piece must be twice the length of the middle-sized piece, and the shortest piece must be 10 inches shorter than the middle-sized piece. If the original board is 70 inches long, how long must each piece be?