Name:

Algebra

Section 2.5

**Solve using the five-step plan. A choice of possible numbers for one unknown is given.**

1. The gym is 21 years newer than the auditorium. The gym is also one fourth as old as the auditorium. How old is each building? Choices for the auditorium’s age: 26, 27, 28

2. One number is four times another number. The larger number is also 87 more than the smaller number. Find the number. Choices for the smaller number: 29, 30, 33

3. A clown weighs 60 lbs more than a trapeze artist. The trapeze artist weighs two thirds as much as the clown. How much does each weigh? Choices for the weight of the trapeze artist: 110, 120, 125

4. The ninth grade class has 17 more girls than boys. There are 431 students in all. How many boys are there? How many girls are there? Choices for the number of boys: 191, 202, 207

5. Western State College is 18 years older than Southern College. Western is also 2 ½ times as old as Southern. How old is each? Choices for Southern State’s age: 12, 14, 18

6. Leah and Barb started at school and jogged in opposite directions. After 30 minutes they were 10.5 km apart. Barb had traveled 1.5 km farther than Leah. How far did each jog? Choices for Leah’s distance: 4.5, 4.6, 4.7

7. The length of a rectangle is 3 ½ times its width. Its perimeter is 108 cm. Find its length and width. Choices for the width: 10, 12, 16