

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

Date: \_\_\_\_\_

**Lesson 1.5 Introducing Significant Digits****Solve.**

17. Round 8,708,756 to the given number of significant digits.

a) 1 significant digit \_\_\_\_\_

b) 2 significant digits \_\_\_\_\_

c) 3 significant digits \_\_\_\_\_

d) 4 significant digits \_\_\_\_\_

18. Round 46,009.491 to the given number of significant digits.

a) 4 significant digits \_\_\_\_\_

b) 5 significant digits \_\_\_\_\_

c) 6 significant digits \_\_\_\_\_

d) 7 significant digits \_\_\_\_\_

**Solve.**

19. If a stopwatch is capable of showing a time up to one hundredth of a second, how many significant digits in the reading of 200.0000 seconds are reliable?

20. In Neptune's orbit around the Sun, the farthest point from the Sun is 2,829,691,160 miles. If the distance is rounded to the nearest 100,000, how many of the trailing zeros are significant?

21. A measuring cylinder gives a reading of 3.67 liters. Which significant digit is the least reliable?