Practice 1.5

Round each integer to the number of significant digits stated in the parentheses.

7 8,496 (to 2 significant digits)

8 187,204 (to 3 significant digits)

9 39,148 (to 3 significant digits)

10 40,100 (to 2 significant digits)

11 5,300,924 (to 4 significant digits)

12 111,111 (to 4 significant digits)

13 99,000 (to 3 significant digits)

14 820,635 (to 1 significant digit)

Round each decimal to the given number of significant digits.

15 0.7621 (to 1 significant digit)

16 1.0087 (to 2 significant digits)

17 45.91082 (to 5 significant digits)

18 0.08507 (to 3 significant digits)

19 520.8 (to 3 significant digits)

20 4.381 (to 2 significant digit)

Solve.

21 Round 0.09845 and 109,530 to the given number of significant digits.

    a) 1 significant digit

    b) 2 significant digits

    c) 3 significant digits

24 A bag of potatoes weighs 9.42 pounds on a weighing scale. Which of the significant digits in the scale reading is the least reliable? Explain your answer.

25 The thickness of a ream of 500 sheets of paper is 57.15 millimeters. What is the thickness of one sheet of paper correct to 2 significant digits?

26 Given a rectangle of length 36.80 centimeters and width 13.4 centimeters, find the area of the rectangle correct to 3 significant digits.