

Practice 1.5

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

- 7 8,496 (to 2 significant digits) 8,500
- 8 187,204 (to 3 significant digits) 187,000
- 9 39,148 (to 3 significant digits) 39,100
- 10 40,100 (to 2 significant digits) 40,000
- 11 5,300,924 (to 4 significant digits) 5,301,000
- 12 111,111 (to 4 significant digits) 111,100
- 13 99,000 (to 3 significant digits) 99,000
- 14 820,635 (to 1 significant digit) 800,000

Round each decimal to the given number of significant digits.

- 15 0.7621 (to 1 significant digit) .8
- 16 1.0087 (to 2 significant digits) 1.0
- 17 45.91082 (to 5 significant digits) 45.911
- 18 0.08507 (to 3 significant digits) .0851
- 19 520.8 (to 3 significant digits) 521
- 20 4.381 (to 2 significant digit) 4.4

Solve.

- 21 Round 0.09845 and 109,530 to the given number of significant digits.
- a) 1 significant digit 0.1 100,000
- b) 2 significant digits .098 110,000
- c) 3 significant digits .0985; 110,000
- 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.
The digit 2 is the least reliable. 9.42 could be rounded value
- 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? 0.11 mm
- 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. 493 cm²