

Diagnostic Test

Unit 1 Place Value

Purpose: to help the student and instructor determine what, if any, sections of this unit the student needs to study.

Do all the math work neatly on the test itself. The instructor will pay as much attention to the work as the answers.

1. What does “digit” mean in mathematics, and how do we use digits?
2. What does “place value” mean in mathematics?
3. In the number 3,172
 - a) what is the place value of the 3?
 - b) what is the place value of the 1?
 - c) what is the place value of the 7?
 - d) what is the place value of the 2?
4. Write the following number in digits, and put commas in the correct places: *Twenty-eight thousand eight hundred seventy-one*
5. Write the following number in digits, and put commas in the correct places: *Four hundred seventy-six thousand nine hundred ten*
6. Write the following number in digits, and put commas in the correct places: *Fifteen billion two hundred sixteen million five hundred thirty-two thousand one hundred ninety*
7. Write out the following number in words: 324,079,671,843
8. Write out the following number in words: 10,500,000
9. Round 8,463 to the nearest ten.
10. Round 8,463 to the nearest hundred.
11. Round 16,500 to the nearest thousand.
12. Round 9,509,499 to the nearest million.