

# Diagnostic Test Unit 7 Decimals

**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.*

*For questions 1–6, write the following as decimals.*

1.  $\frac{9}{100}$

2.  $\frac{41}{100}$

3.  $5\frac{7}{10}$

4.  $\frac{4}{1000}$

5.  $296\frac{17}{1000}$

6.  $\frac{73}{10,000}$

*For questions 7–11, write the decimals as fractions or mixed numbers and write how to say each fraction or mixed number.*

7. 0.58

8. 100.1

9. 0.397

10. 8.0076

11. 79.651

*For problems 12–17 do the addition or subtraction.*

12.  $5.267 + .0844 =$

13.  $295 + 20.097 =$

14.  $39.768 + 0.29 + 5 =$

15.  $743.657 - 59.9 =$

$$16. 526 - 32.724 =$$

$$17. 19.1 - 3.754 =$$

*For questions 18–20 do the multiplication. Do not round off your answers.*

$$18. 7.24 \times 8.59 =$$

$$19. 346 \times 5.089 =$$

$$20. 4.19 \times 10,000 =$$

*For questions 21–23, do the division.*

$$21. 7.4 \overline{)412.92}$$

$$22. .75 \overline{)21.3}$$

$$23. 1,000 \overline{)37}$$

*For questions 24 and 25, round your answers to the nearest hundredth.*

$$24. 75.62 \times 9.087 =$$

$$25. 4.67 \overline{)2}$$

*For questions 26 and 27, change each fraction or mixed number to a decimal*

$$26. \frac{7}{20}$$

$$27. 3\frac{5}{8}$$

*For questions 28 and 29, show how to write a repeating decimal.*

$$28. 9 \overline{)8.00}$$

$$29. 18 \overline{)11.00}$$