

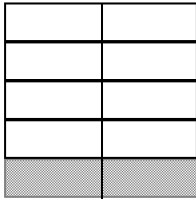
unit 3 practice test**Multiple Choice***Identify the choice that best completes the statement or answers the question.*

- _____ 1. Write $\frac{9}{25}$ as a decimal.
a. 1.6 b. 0.64 c. 0.4 d. 0.36
- _____ 2. Write $\frac{23}{8}$ as a decimal. Identify the decimal as terminating or repeating.
a. 2.875; terminating c. 2.9; terminating
b. 2.8753; repeating d. 0.9583; repeating
- _____ 3. Write $0.\overline{54}$ as a fraction in simplest form.
a. $\frac{6}{11}$ b. $\frac{27}{500}$ c. $\frac{27}{50}$ d. $\frac{1}{2}$
- _____ 4. What is the least number in the set?
 $\frac{2}{3}, \frac{3}{4}, \frac{5}{8}, \frac{1}{2}$
a. $\frac{5}{8}$ b. $\frac{1}{2}$ c. $\frac{3}{4}$ d. $\frac{2}{3}$
- _____ 5. Add.
 $6.068 + 1.38$
a. 7.448 b. 7.438 c. 7.348 d. 7.338
- _____ 6. Add.
 $0.769 + 24.3 + 5.8$
a. 1.07 b. 108.89 c. 1.0889 d. 30.869
- _____ 7. Multiply.
 2.2×70
a. 154 b. 1540 c. 15.4 d. 92
- _____ 8. Determine the cost of 3.54 kg apples at \$0.95/kg.
a. \$33.63 b. \$4.49 c. \$3.36 d. \$0.45
- _____ 9. Divide.
 $1.98 \div 0.3$
a. 0.066 b. 6.6 c. 66 d. 0.66
- _____ 10. Estimate the quotient.
 $58.9 \div 2.9$
a. 0.203 b. 203 c. 20.3 d. 2.03
- _____ 11. How many pieces of ribbon 0.6 m long can be cut from 13.2 m of ribbon?
a. 22 b. 2.2 c. 16 d. 220

Name: _____

ID: A

- _____ 12. At the Mega Theater, 8 out of the 20 movies this month are comedies. What percent of the movies are comedies?
a. 0.4% b. 40% c. 4% d. 250%
- _____ 13. Everyone in Stuart's class has to do a science project.
Out of the 40 students, 60% have completed their projects.
How many students have completed their projects?
a. 20 students b. 64 students c. 16 students d. 24 students
- _____ 14. Write 0.28 as a fraction in simplest form.
a. $\frac{28}{99}$ b. $\frac{99}{28}$ c. $\frac{1}{5}$ d. $\frac{7}{25}$
- _____ 15. Write 6% as a decimal.
a. 0.6 b. 0.006 c. 6 d. 0.06
- _____ 16. Write $\frac{2}{5}$ as a percent.
a. 400% b. 40% c. 20% d. 200%
- _____ 17. Write 0.73 as a percent.
a. 0.73% b. 73% c. 0.073% d. 7.3%
- _____ 18. What fraction of the diagram is shaded? Write the fraction as a percent.



- a. $\frac{4}{5}$; 80% b. $\frac{2}{10}$; 20% c. $\frac{2}{10}$; 2% d. $\frac{4}{5}$; 80%
- _____ 19. Calculate 40% of 65.
a. 3 b. 7 c. 26 d. 13
- _____ 20. Kevin earned \$190 babysitting. He saved 20% of his money. How much did he save?
a. \$38 b. \$53 c. \$43 d. \$48

Short Answer

21. A baker wants to make three different kinds of shortbread. The recipes call for 2.47 kg, 3.27 kg, and 5.11 kg of butter. How many kilograms of butter does the baker need? Estimate, then calculate.
22. A rectangle has an area of 2.1 m². The width of the rectangle is 0.6 m.
What is the length of the rectangle?

Name: _____

ID: A

23. Evaluate.

$$7 + 8.8 \times 7 \div 8 - 0.4 \times 8$$

24. Evaluate.

$$8.9 \times 12 - (8.8 - 3.4)$$

25. Use any method. Order the following numbers from greatest to least.

$$1\frac{5}{8}, \frac{7}{4}, 1.5, 1.875$$

26. Use any strategy to Order the numbers from greatest to least.

$$1\frac{3}{8}, \frac{9}{8}, \frac{3}{2}, 1\frac{2}{5}$$

27. Frank buys 3 pencils for \$0.84 each and 4 notebooks for \$3.58 each.
How much does he have to pay?

28. The food Caitlin and Rory order in a restaurant cost \$52.
Tax of 8% was added, then Caitlin added a tip of 20% of the total.
What was the final cost of the meal?

unit 3 practice test
Answer Section

MULTIPLE CHOICE

1. ANS: D PTS: 1 DIF: Easy REF: 3.1 Fractions to Decimals
 LOC: 7.N4 TOP: Number KEY: Procedural Knowledge
2. ANS: A PTS: 1 DIF: Moderate REF: 3.1 Fractions to Decimals
 LOC: 7.N4 TOP: Number KEY: Conceptual Understanding
3. ANS: A PTS: 1 DIF: Moderate REF: 3.1 Fractions to Decimals
 LOC: 7.N4 TOP: Number KEY: Conceptual Understanding
4. ANS: B PTS: 1 DIF: Easy
 REF: 3.2 Comparing and Ordering Fractions and Decimals LOC: 7.N7
 TOP: Number KEY: Conceptual Understanding
5. ANS: A PTS: 1 DIF: Easy
 REF: 3.3 Adding and Subtracting Decimals LOC: 7.N2
 TOP: Number KEY: Procedural Knowledge
6. ANS: D PTS: 1 DIF: Moderate
 REF: 3.3 Adding and Subtracting Decimals LOC: 7.N2
 TOP: Number KEY: Procedural Knowledge
7. ANS: A PTS: 1 DIF: Easy REF: 3.4 Multiplying Decimals
 LOC: 7.N2 TOP: Number KEY: Procedural Knowledge
8. ANS: C PTS: 1 DIF: Moderate REF: 3.4 Multiplying Decimals
 LOC: 7.N2 TOP: Number KEY: Problem-solving Skills
9. ANS: B PTS: 1 DIF: Moderate REF: 3.5 Dividing Decimals
 LOC: 7.N2 TOP: Number KEY: Procedural Knowledge
10. ANS: C PTS: 1 DIF: Moderate REF: 3.5 Dividing Decimals
 LOC: 7.N2 TOP: Number KEY: Procedural Knowledge
11. ANS: A PTS: 1 DIF: Moderate REF: 3.5 Dividing Decimals
 LOC: 7.N2 TOP: Number KEY: Problem-solving Skills
12. ANS: B PTS: 1 DIF: Moderate
 REF: 3.7 Relating Fractions, Decimals, and Percents LOC: 7.N3
 TOP: Number KEY: Problem-solving Skills
13. ANS: D PTS: 1 DIF: Moderate REF: 3.8 Solving Percent Problems
 LOC: 7.N3 TOP: Number KEY: Problem-solving Skills
14. ANS: D PTS: 1 DIF: Moderate REF: 3.1 Fractions to Decimals
 LOC: 7.N4 TOP: Number KEY: Procedural Knowledge
15. ANS: D PTS: 1 DIF: Easy
 REF: 3.7 Relating Fractions, Decimals, and Percents LOC: 7.N3
 TOP: Number KEY: Conceptual Understanding
16. ANS: B PTS: 1 DIF: Easy
 REF: 3.7 Relating Fractions, Decimals, and Percents LOC: 7.N3
 TOP: Number KEY: Procedural Knowledge
17. ANS: B PTS: 1 DIF: Easy
 REF: 3.7 Relating Fractions, Decimals, and Percents LOC: 7.N3
 TOP: Number KEY: Conceptual Understanding

18. ANS: B PTS: 1 DIF: Moderate
REF: 3.7 Relating Fractions, Decimals, and Percents LOC: 7.N3
TOP: Number KEY: Conceptual Understanding
19. ANS: C PTS: 1 DIF: Easy REF: 3.8 Solving Percent Problems
LOC: 7.N3 TOP: Number KEY: Procedural Knowledge
20. ANS: A PTS: 1 DIF: Moderate REF: 3.8 Solving Percent Problems
LOC: 7.N3 TOP: Number KEY: Problem-solving Skills

SHORT ANSWER

21. ANS:
Use front-end estimation: $2 + 3 + 5 = 10$; 10.85
The baker needs approximately 10 kg of butter.
The baker needs exactly 10.85 kg of butter.
- PTS: 1 DIF: Moderate REF: 3.3 Adding and Subtracting Decimals
LOC: 7.N2 TOP: Number KEY: Problem-solving Skills
22. ANS:
3.5 m
- PTS: 1 DIF: Moderate REF: 3.5 Dividing Decimals
LOC: 7.N2 TOP: Number KEY: Problem-solving Skills
23. ANS:
11.5
- PTS: 1 DIF: Moderate REF: 3.6 Order of Operations with Decimals
LOC: 7.N2 TOP: Number KEY: Procedural Knowledge
24. ANS:
101.4
- PTS: 1 DIF: Moderate REF: 3.6 Order of Operations with Decimals
LOC: 7.N2 TOP: Number KEY: Procedural Knowledge
25. ANS:
 $1.875, \frac{7}{4}, 1\frac{5}{8}, 1.5$
- PTS: 1 DIF: Moderate REF: 3.2 Comparing and Ordering Fractions and Decimals
LOC: 7.N7 TOP: Number KEY: Procedural Knowledge
26. ANS:
 $1\frac{3}{8} = 1.375; \frac{9}{8} = 1.125; \frac{3}{2} = 1.5; 1\frac{2}{5} = 1.4$
From greatest to least: $\frac{3}{2}, 1\frac{2}{5}, 1\frac{3}{8}, \frac{9}{8}$
- PTS: 1 DIF: Moderate REF: 3.2 Comparing and Ordering Fractions and Decimals
LOC: 7.N7 TOP: Number KEY: Procedural Knowledge

PROBLEM

27. ANS:

Frank has to pay \$16.84.

PTS: 1

DIF: Moderate

REF: 3.4 Multiplying Decimals

LOC: 7.N2

TOP: Number

KEY: Problem-solving Skills

28. ANS:

Cost + tax: $\$52 + 0.08 \times \$52 = \$56.16$ Total cost: $\$56.16 + 0.20 \times \$56.16 = \$67.39$

The total cost of the meal was \$67.39.

PTS: 1

DIF: Difficult

REF: 3.8 Solving Percent Problems

LOC: 7.N3

TOP: Number

KEY: Problem-solving Skills