

Chapter 7 Exam v1

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Solve the problem.

- 1) Dana and Sara went shopping. Dana spent \$272.32 and Sara spent \$16.29. How much more did Dana spend than Sara? 1) _____
A) \$256.03 B) \$256.32 C) \$288.61 D) \$288.32

Write the following in words.

- 2) 0.87 2) _____
A) Eighty-seven tenths B) Eighty-seven thousandths
C) Eighty-seven hundredths D) Eighty-seven hundred-thousandths

Solve the problem.

- 3) You just put \$1177 in a CD that is expected to earn 15% compounded quarterly, and \$8184 in a savings account that is expected to earn 3% compounded semiannually. Determine when, to the nearest year, the values of your two investments will be the same. 3) _____
A) 7 years B) 12 years C) 17 years D) 21 years

Write the following as a sum using powers of 10 to show place value.

- 4) 6.000622 4) _____
A) $6 \cdot 10^1 + 6 \cdot 10^{-1} + 2 \cdot 10^{-2} + 2 \cdot 10^{-3}$
B) $6 \cdot 10^{-1} + 0 \cdot 10^1 + 0 \cdot 10^2 + 0 \cdot 10^3 + 6 \cdot 10^4 + 2 \cdot 10^5 + 2 \cdot 10^6$
C) $6 \cdot 10^0 + 6 \cdot 10^{-1} + 2 \cdot 10^{-2} + 2 \cdot 10^{-3}$
D) $6 \cdot 10^0 + 0 \cdot 10^{-1} + 0 \cdot 10^{-2} + 0 \cdot 10^{-3} + 6 \cdot 10^{-4} + 2 \cdot 10^{-5} + 2 \cdot 10^{-6}$

Write the fraction in decimal notation.

- 5) $\frac{5}{11}$ 5) _____
A) $0.4\overline{8}$ B) $0.4\overline{5}$ C) $0.\overline{48}$ D) $0.\overline{45}$

Write the following in words.

- 6) 17.088 6) _____
A) Seventeen and eighty-eight ten-thousandths
B) Seventeen and eighty-eight thousandths
C) Seventeen and eighty-eight hundredths
D) Seventeen and eighty-eight tenths

Rewrite the number or expression as requested.

- 7) 32,000,000,000 (Rewrite in scientific notation.) 7) _____
A) $3.2 \cdot 10^9$ B) $3.2 \cdot 10^{-9}$ C) $3.2 \cdot 10^{-10}$ D) $3.2 \cdot 10^{10}$

Solve the problem.

- 8) A gardener has 32 clients, 50% of whom are businesses. Find the number of business clients. 8) _____
A) 16,000 clients B) 1600 clients C) 160 clients D) 16 clients

Convert the repeating decimal to a fraction.

9) $0.\overline{27}$

A) $\frac{10}{37}$

B) $\frac{3}{11}$

C) $\frac{30}{11}$

D) $\frac{1}{37}$

9) _____

Rewrite the following as indicated.

10) $\frac{4}{5}$ (Write as a percent.)

A) 410%

B) 400%

C) 80%

D) 405%

10) _____

Solve the problem.

11) Jack is currently driving into a headwind (17% decrease). If his normal mileage is 21 mpg, what will his car's mileage be in the headwind? Round your answer to the nearest tenth.

A) 38 mpg

B) 17.4 mpg

C) 21 mpg

D) 7.3 mpg

11) _____

12) A stockbroker sold 50 shares of stock for \$12.95 each. What was the total amount of the sale?

A) \$647.60

B) \$647.40

C) \$647.50

D) \$647.61

12) _____

Rewrite the following in its equivalent decimal form.

13) $1 \cdot 10^2 + 6 \cdot 10 + 2 + 8 \cdot 10^{-1} + 2 \cdot 10^{-4}$

A) 16.28002

B) 16.802

C) 162.8002

D) 16.8002

13) _____

Order the decimals from least to greatest.

14) $0.\overline{3}$, $0.3\overline{63}$, $0.\overline{36}$, $0.3\overline{6}$

A) $0.3\overline{6}$, $0.\overline{36}$, $0.3\overline{63}$, $0.\overline{3}$

B) $0.\overline{36}$, $0.3\overline{6}$, $0.\overline{3}$, $0.3\overline{63}$

C) $0.\overline{3}$, $0.3\overline{63}$, $0.\overline{36}$, $0.3\overline{6}$

D) $0.3\overline{63}$, $0.3\overline{6}$, $0.\overline{3}$, $0.\overline{36}$

14) _____

Estimate an answer to the problem.

15) A 22-ounce can of coffee is 6.3 inches (.525 ft) tall. How many 22-ounce cans of coffee stacked one on top of another would it take to reach the top of a building that is 12 feet tall? Round to the nearest one.

A) 7

B) 43

C) 30

D) 23

15) _____

Rewrite the following in its equivalent decimal form.

16) $5 \cdot 10^2 + 4 \cdot 10 + 7 \cdot 10^{-1} + 2 \cdot 10^{-2}$

A) 540.72

B) 54.072

C) 54.72

D) 5472

16) _____

Solve the problem.

17) Angela bought a computer for \$2600. It depreciated 20% of its original cost in the first year. In the second year, it depreciated 11% of its remaining value. What is the value of the computer at the end of the second year? Round your answer to the nearest cent.

A) \$1794.00

B) \$1664.00

C) \$2308.80

D) \$1851.20

17) _____

18) Alex and Juana went on a 50-mile canoe trip with their class. On the first day they traveled 23 miles. What percent of the total distance did they canoe?

A) 46%

B) 200%

C) 2%

D) 0.46%

18) _____

Write the terminating decimal as $\frac{a}{b}$ in simplest form where $a, b \in \mathbb{I}$ and $b \neq 0$.

19) 6.95

A) $\frac{139}{10}$

B) $\frac{139}{40}$

C) $\frac{1}{695}$

D) $\frac{139}{20}$

19) _____

Find the compound interest earned by the deposit. Round to the nearest cent.

20) \$700 at 8% compounded quarterly for 5 years

A) \$772.86

B) \$280.00

C) \$328.53

D) \$340.16

20) _____