

Name \_\_\_\_\_ atfm0301car2810yes

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PROGRAMS: ALVAREZLAB AND INTERACTMATH (CARSON PREALGEBRA 3RD EDITION)

**MULTIPLE CHOICE.** Choose the one alternative that best completes the statement or answers the question.**Simplify using order of operations.**

- 1)  $-10\sqrt{100} + |22 \div (-11)| - (22 - 10)$  1) \_\_\_\_\_  
 A) -130      B) -110      C) -101      D) -86

Objective: (2.5) Use Order of Operations (with Radical)

VIDEO 26

- 2)  $\frac{-19 + 5^2 - (-15)}{-6 - 9 + 18}$  2) \_\_\_\_\_  
 A) 4      B) -7      C) -4      D) 7

Objective: (2.5) Use Order of Operations (Quotient)

VIDEO 27

**Evaluate.**

- 3)  $-|4m + 4n|$ ;  $m = -8, n = 3$  3) \_\_\_\_\_  
 A) -15      B) -17      C) -20      D) -24

Objective: (3.1) Evaluate Algebraic Expression

VIDEO 31

**Evaluate the expression using the given values.**

- 4)  $\frac{x^2}{2z+y}$ ;  $x = 5, y = -1, z = 3$ . 4) \_\_\_\_\_  
 A) 5      B) -5      C) 25      D)  $\frac{25}{7}$

Objective: (3.1) Evaluate Algebraic Expression (Rational/Radical)

VIDEO 33

**Subtract and write the resulting polynomial in descending order of degree.**

- 5)  $(9p^2 + 12p + 8) - (3p^2 + 4p - 6)$  5) \_\_\_\_\_  
 A)  $6p^2 - 8p - 14$       B)  $6p^2 + 8p + 2$       C)  $6p^2 + 8p + 14$       D)  $6p^4 + 8p^2 + 14$

Objective: (3.3) Subtract Polynomials

VIDEO 41

**Find the prime factorization. Write the answer in exponential form.**

- 6) 30 6) \_\_\_\_\_  
 A)  $2 \cdot 3 \cdot 5$       B)  $2^2 \cdot 5$       C)  $6 \cdot 5$       D)  $3^2 \cdot 2$

Objective: (3.5) Find Prime Factorization

VIDEO 48

**Solve and check.**

- 7)  $4(y + 2) = 5(y - 2)$  7) \_\_\_\_\_  
 A)  $y = 2$       B)  $y = -18$       C)  $y = 18$       D)  $y = -2$

Objective: (4.2) Solve Linear Equation

VIDEO 53

- 8)  $7y - 2(y - 2) = 9y - (5y + 8)$  8) \_\_\_\_\_  
 A)  $y = 4$       B)  $y = -12$       C)  $y = 12$       D)  $y = -4$

Objective: (4.2) Solve Linear Equation

VIDEO 55

**Multiply and express the product in lowest terms.**

9)  $\frac{15}{18} \cdot \frac{3}{5}$

9) \_\_\_\_\_

A)  $\frac{1}{5}$

B)  $\frac{6}{7}$

C)  $\frac{45}{90}$

D)  $\frac{1}{2}$

Objective: (5.3) Multiply Fractions (Express in Lowest Terms)

VIDEO 67

10)  $-\frac{12x^4y}{10z} \cdot \frac{20z}{20x^2}$

10) \_\_\_\_\_

A)  $-\frac{6x^2y}{5}$

B)  $-\frac{3x^2y}{10}$

C)  $-\frac{6x^2yz}{5}$

D)  $-\frac{6x^2z}{5}$

Objective: (5.3) Multiply Rational Expressions

VIDEO 68

**Solve.**

11)  $-\frac{16}{21}y = -\frac{4}{15}$

11) \_\_\_\_\_

A)  $\frac{28}{5}$

B)  $\frac{16}{35}$

C)  $\frac{35}{16}$

D)  $\frac{7}{20}$

Objective: (5.4) Solve Equation with Fractions

VIDEO 72

**Find the LCM.**

12)  $30h^5k$  and  $360h^2k^3$

12) \_\_\_\_\_

A)  $360h^5k^3$

B)  $360h^7k^4$

C)  $30h^2k$

D)  $15h^2k$

Objective: (5.5) Find the LCM (Variables/Exponents)

VIDEO 74

**Add or subtract.**

13)  $\frac{4}{8} + \frac{1}{12} + \frac{4}{15}$

13) \_\_\_\_\_

A)  $\frac{59}{180}$

B)  $\frac{17}{20}$

C)  $1\frac{7}{10}$

D)  $\frac{3}{40}$

Objective: (5.6) Add/Subtract Fractions/Rational Expressions (Different Denominators)

VIDEO 77

**Solve.**

14)  $k + \frac{1}{5} = \frac{1}{2}$

14) \_\_\_\_\_

A)  $\frac{2}{5}$

B) 3

C)  $\frac{3}{10}$

D)  $\frac{7}{10}$

Objective: (5.6) Solve Equation with Fractions

VIDEO 80

**Simplify.**

15)  $\left(\frac{2}{3}\right)^2 + 5\frac{1}{3} \div 1\frac{1}{5}$

15) \_\_\_\_\_

A)  $4\frac{22}{27}$

B)  $5\frac{1}{9}$

C)  $4\frac{8}{9}$

D)  $5\frac{7}{9}$

Objective: (5.7) Order of Operations (Fractions)

VIDEO 82

**Solve.**

16)  $-7.4q + 1.3 = -28.2 - 1.5q$

A)  $q = -35$

B)  $q = 5$

C)  $q = 4.2$

D)  $q = 4.0$

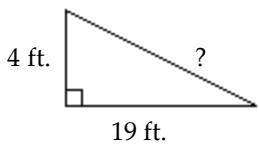
16) \_\_\_\_\_

Objective: (6.6) Solve Equation Using Add/Sub/Mult/Div Principles

VIDEO 94

- 17) The diagram below shows the side view of a plan for a slanted roof. Find the unknown length in this roof plan.

17) \_\_\_\_\_



A) 9.7 ft.

B) 188.5 ft.

C) 19.4 ft.

D) 11.5 ft.

Objective: (6.6) Solve Apps: Solving Eqns/Numbers/Pythagorean Theorem

VIDEO 97

**Solve for the missing number.**

18)  $\frac{48}{132} = \frac{12}{x}$

A)  $\frac{576}{132}$

B) 1536

C)  $\frac{1}{33}$

D) 33

18) \_\_\_\_\_

Objective: (7.2) Solve Proportions

VIDEO 98

19)  $\frac{1}{2} = \frac{n}{4 \frac{1}{7}}$

A)  $2\frac{1}{14}$

B)  $3\frac{1}{2}$

C)  $8\frac{1}{7}$

D)  $\frac{14}{29}$

19) \_\_\_\_\_

Objective: (7.2) Solve Proportions

VIDEO 99

**Solve the problem.**

- 20) If 4 sandwich rolls cost \$1.08, how much will 24 rolls cost?

20) \_\_\_\_\_

A) \$7.48

B) \$6.48

C) \$4.32

D) \$6.32

Objective: (7.2) Solve Apps: Proportions

VIDEO 100

**Translate to a proportion and solve.**

- 21) 51 is 60% of what number?

21) \_\_\_\_\_

A) 8.5

B) 30.6

C) 85

D) 850

Objective: (8.3) Solve Percent Problem for Whole

VIDEO 104

**Translate to a proportion and solve. Round the answer to the nearest tenth of a percent if necessary.**

- 22) What percent of 1080 is 54?

22) \_\_\_\_\_

A) 20%

B) 5%

C) 21%

D) 6%

Objective: (8.3) Solve Percent Problem for Percent

VIDEO 105

**Solve the problem.**

- 23) The appliance store where the Scott family shops offers a 6% discount for paying cash. The Scott family received a discount of \$41. What was their total bill before the discount?

23) \_\_\_\_\_

A) \$683

B) \$200

C) \$2

D) \$7

Objective: (8.4) Solve Apps: Solve for Whole Amount in Percent Problem

VIDEO 107

**Solve.**

- 24) A camera costs \$670. If the sales tax rate is 4%, how much tax is charged and what is the total price? Round your answers to the nearest cent.
- A) \$268.00, \$938.00      B) \$20.10, \$690.10  
C) \$26.80, \$696.80      D) \$33.50, \$703.50

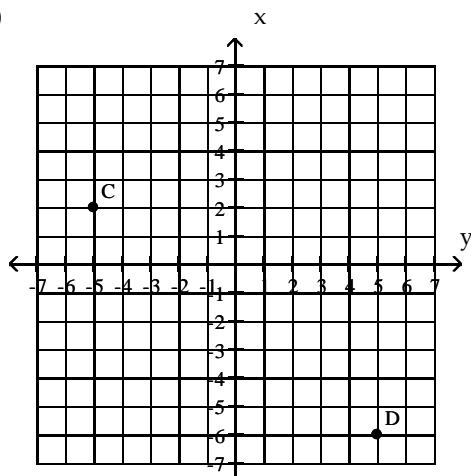
24) \_\_\_\_\_

Objective: (8.5) Solve Apps: Solve Given Percent Increase (Sales Tax)

VIDEO 109

Give the coordinates of the points shown on the graph.

25)



25) \_\_\_\_\_

- A) C = (-5, -6), D = (2, -6)  
C) C = (-5, 2), D = (-6, 5)

- B) C = (2, 6), D = (-6, 5)  
D) C = (-5, 2), D = (5, -6)

Objective: (9.2) Find Coordinates of Point on Graph

VIDEO 113

## Answer Key

Testname: AT4M0301CAR2810

- 1) B
- 2) D
- 3) C
- 4) A
- 5) C
- 6) A
- 7) C
- 8) B
- 9) D
- 10) A
- 11) D
- 12) A
- 13) B
- 14) C
- 15) C
- 16) B
- 17) C
- 18) D
- 19) A
- 20) B
- 21) C
- 22) B
- 23) A
- 24) C
- 25) D