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

Write the following as multiplication.

1) $(8x)^3$ 1) _____

A) $8 \cdot x \cdot x \cdot x$ B) $8x + 8x + 8x$ C) $24 \cdot 3x$ D) $8x \cdot 8x \cdot 8x$

2) t^4 2) _____

A) $t + t + t + t$ B) $t + 4$ C) $\frac{t}{4}$ D) $t \cdot t \cdot t \cdot t$

3) $6z^4$ 3) _____

A) $6 + z + z + z + z$ B) $6z \cdot 6z \cdot 6z \cdot 6z$ C) $24 \cdot 4z$ D) $6 \cdot z \cdot z \cdot z \cdot z$

Simplify.

4) $240 \div 8 - 2$ 4) _____

A) 230 B) 28 C) 234 D) 40

5) $2 \cdot 5 - 5$ 5) _____

A) 50 B) 15 C) 5 D) 0

6) $12 \cdot 12 - (15 - 12) \div 3 - (9 - 8)$ 6) _____

A) 46 B) 38 C) 142 D) 126

7) $288 \div (24 \div 6)$ 7) _____

A) 284 B) 2 C) 12 D) 72

8) $71 - 4 \cdot 6 \cdot 2$ 8) _____

A) 59 B) 94 C) 23 D) 804

9) $300 \div 15 - (5 + 5)$ 9) _____

A) 10 B) 15 C) 60 D) 20

Evaluate.

10) $\left(\frac{3}{8}\right)^2$ 10) _____

A) $\frac{9}{64}$ B) $\frac{9}{8}$ C) $\frac{3}{64}$ D) $\frac{6}{16}$

11) x^3 for $x = 1, y = 5$ 11) _____

A) 3 B) 2 C) 1 D) 125

12) x^3y for $x = 1, y = 2$ 12) _____

A) 2 B) 8 C) 3 D) 6

13) $x^3 + 4 + y$ for x = 1, y = 3 13) _____

A) 0 B) 8 C) 10 D) 11

14) 6^2 14) _____

A) 36 B) 49 C) 12 D) 64

15) 10^5 15) _____

A) 9,765,625 B) 50 C) 100,000 D) 1,000,000

Simplify by using the order of operations.

16) $4 \cdot 8 - 2 \cdot 5 + 5 \cdot 2$ 16) _____

A) 42 B) -42 C) -32 D) 32

17) $28 \div 4 + 35 \div 5$ 17) _____

A) 8.4 B) 47 C) 39 D) 14

18) $4 \cdot 2 + 10 \cdot 3$ 18) _____

A) 38 B) 144 C) 54 D) 128

Solve the problem by finding and evaluating an appropriate expression.

19) Four fraternity brothers agree to split the cost equally for 2 pizzas that cost $6.99 each and 4 soft drinks that cost 99 cents each. Find the amount (to the nearest cent) that each pays. 19) _____

A) $4.99 B) $4.49 C) $17.94 D) $102.50

20) An automobile lease company offers a plan where the customer pays $500 down and $399 per month for 3 years. Find the total cost of leasing the car. 20) _____

A) $902 B) $32,364 C) $1697 D) $14,864

21) Tara leased a car with the following terms: she agreed to pay $1000 down, $399 per month for 30 months, and 20 cents per mile for all mileage in excess of 20,000. When she returned the car at the end of the lease period, it had 25,000 miles on the odometer. Find the total amount Tara paid for the lease. 21) _____

A) $16,970 B) $13,970 C) $112,970 D) $17,970

Write the following using exponents.

22) $(b + c)(b + c)(b + c)$ 22) _____

A) $(b + c)^3$ B) $b^3 + c^3$ C) $3b + 3c$ D) $3(b + c)$

23) $8 \cdot 8 \cdot 8 \cdot 8 \cdot 8 \cdot 8$ 23) _____

A) 6^8 B) 8^5 C) 8^6 D) 48

24) $x \cdot x \cdot x \cdot x$ 24) _____

A) 4 B) 4(x) C) 4^x D) x^4

Answer Key
Testname: 1.7.22 CON VAR EXP ORDEROFOP 2

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