

CHAPTER

1

Test

1. Explain why we use the order of operations in mathematics.

so that answers will be consistent

2. List three like terms with the variable k . $\frac{k}{2}, 3k, 7k$

Write an algebraic expression for each verbal expression.

3. x increased by 12

$x + 12$

4. the quotient of 5 and y

$\frac{5}{y}$

5. 1 less than 8 times p

$8p - 1$

Use the order of operations to find the value of each expression.

6. $13 + 4 \cdot 5$

33

7. $12 + 6 \div 3 - 4$

10

8. $3(8 + 2) - 7$

23

Evaluate each expression if $h = 8, j = 3,$ and $k = 2$.

9. $k(4 + j) + 6$

20

10. $\frac{h+k}{h-j}$

2

Name the property shown by each statement.

11. If $11 = 7 + x$, then $7 + x = 11$.

symmetric

12. $28 \cdot 1 = 28$

multiplicative identity

13. $(r \cdot 9) \cdot 3 = r \cdot (9 \cdot 3)$

associative (\cdot)

14. $10 + b = b + 10$

commutative ($+$)

15. $6(m + 2) = 6 \cdot m + 6 \cdot 2$

distributive

Simplify each expression.

16. $n + 5n$

$6n$

17. $6x - 4x + 9y - 4y$

$2x + 5y$

18. $4(2s + 8t - 1)$

$8s + 32t - 4$

19. **Sports** Danny stayed late after every basketball practice to shoot 5 free throws. The chart shows how many free throws he made out of 5 for each night of practice.

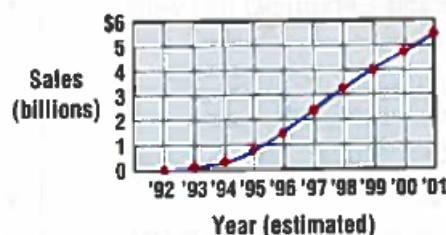
- a. Make a frequency table to organize the data. *see next slide*
- b. If Danny has basketball practice 5 days a week, how many weeks did he stay late, shooting free throws? *4 weeks*
- c. What number of free throws did he make most often? *3 FTs*
- d. How many times did he not make any free throws? *2 times*
- e. How many times did he make all 5 free throws? *1 time*

Free Throws (out of 5)			
1	4	0	2
1	3	3	2
4	3	3	2
5	3	2	2
1	0	4	3

20. **Communication** The line graph shows the growth in sales of prepaid calling cards. *1996-97 or 1997-98*

- a. Between which two years was growth in sales the greatest?
- b. Predict the number of sales for the year 2002. *≈ \$6.1 billion*

Sales of Prepaid Calling Cards



Source: Atlantic ACM

10) A.

Free Throws	Tally	Frequency
0		2
1		3
2	 	5
3	 	6
4		3
5		1