Name _____ Class _____ Date _____

Practice 1-1

Using Variables

Write an algebraic expression for each phrase.

1. 7 increased by x

2. p multiplied by 3

3. 10 decreased by m

4. n less than 7

5. the product of 2 and q

6. 3 more than m

Write a phrase for each algebraic expression.

7. $\frac{8}{a}$

8. $s - 10$

9. $x + 13$

10. $ab + 2$

Define a variable and write an algebraic expression for each phrase.

11. the difference of 8 and a number

12. the sum of 4 and a number

13. the product of 2 and a number

14. 3 increased by a number

15. 10 plus the quotient of a number and 15

16. 12 less than a number

Define a variable and write an algebraic equation to model each situation.

17. What is the total cost of buying several shirts at $24.95 each?

18. The number of gal of water used to water trees is 30 times the number of trees.

19. What is the amount of money in a bank containing only dimes?

20. What is the number of marbles left in a 48-marble bag after some marbles have been given away?

21. The total cost equals the price of the tickets multiplied by eight people.

22. What is the cost of buying several pairs of pants at $32.95 per pair?

Define variables and write an equation to model the relationship in each table.

23.

Number of Tickets	Total Cost
2	$7
4	$14
6	$21

24.

Number of Hours	Distance Traveled
1	55 mi
3	165 mi
5	275 mi

25.

Number of Hours	Total Pay
8	$40
12	$60
16	$80

26.

Total Cost	Change From $10
$10.00	$0
$9.00	$1.00
$7.50	$2.50

27.

Number of Days	Length
1	0.45 in.
4	1.80 in.
8	3.60 in.

28.

Miles Traveled	Miles Remaining
0	500
125	375
350	150