

**Chapter Test A***For use after Chapter 1***Evaluate the expression.**

1.  $12 - q$  when  $q = 8$                       2.  $3x$  when  $x = 9$   
 3.  $w^3$  when  $w = 2$                           4.  $\frac{24}{t}$  when  $t = 4$

**Write the power as a product.**

5.  $10^4$                                       6.  $(2.6)^3$                                       7.  $n^6$   
 8. The height of a horse is often measured in hands. You can estimate the height (in inches) of a horse by using the expression  $4h$ , where  $h$  is the number of hands. How tall is a horse that measures 14 hands?

**Evaluate the expression.**

9.  $12 \div 3 - 1$                                       10.  $15 - 7 \cdot 2$   
 11.  $2 + 2^3 \div 4$                                       12.  $5(3^2 - 4)$

**Translate the verbal phrase into an algebraic expression.**

13. The sum of a number  $x$  and 9  
 14. Six less than a number  $w$  squared  
 15. The number of quarters in  $d$  dollars

**Write an equation or an inequality.**

16. Three more than twice a number  $b$  is equal to 13.  
 17. The product of 5 and a number  $k$  is less than 60.

**Check whether the given number is a solution of the equation or the inequality.**

18.  $10x - 3 = 27$ ; 3                                      19.  $4y - 1 \geq 20$ ; 4  
 20.  $2x + 1 < 17$ ; 8                                      21.  $4a - 7 = 3a - 4$ ; 3  
 22. A bicycle travels at an average speed of 15 miles per hour. How many miles does the bicycle travel in 1.5 hours?

**Answers**

1. \_\_\_\_\_  
 2. \_\_\_\_\_  
 3. \_\_\_\_\_  
 4. \_\_\_\_\_  
 5. \_\_\_\_\_  
 6. \_\_\_\_\_  
 7. \_\_\_\_\_  
 8. \_\_\_\_\_  
 9. \_\_\_\_\_  
 10. \_\_\_\_\_  
 11. \_\_\_\_\_  
 12. \_\_\_\_\_  
 13. \_\_\_\_\_  
 14. \_\_\_\_\_  
 15. \_\_\_\_\_  
 16. \_\_\_\_\_  
 17. \_\_\_\_\_  
 18. \_\_\_\_\_  
 19. \_\_\_\_\_  
 20. \_\_\_\_\_  
 21. \_\_\_\_\_  
 22. \_\_\_\_\_

**CHAPTER 1**

**Chapter Test A** *continued*  
For use after Chapter 1

Tell whether the pairing is a function.

23.

Input	Output
0	3
5	7
10	7
15	11

24.

Input	Output
1	12
2	6
2	3
3	1.5

Make a table for the function. Identify the range of the function.

25.  $y = 2x + 1$

Domain: 0, 1, 2, 3

Input, $x$				
Output, $y$				

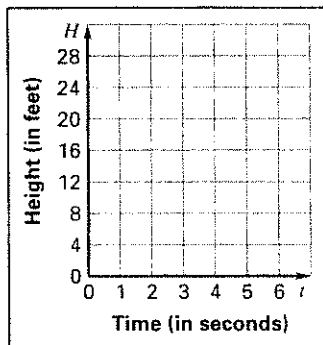
26.  $y = 20 - 3x$

Domain: 0, 2, 4, 6

Input, $x$				
Output, $y$				

27. The table shows the height  $H$  (in feet) of an object as a function of the time  $t$  (in seconds) after being thrown vertically upward. Graph the function.

Time elapsed, $t$	0	1	2	3	4	5
Height, $H$	6	23	28	24	18	13



**Answers**

23. \_\_\_\_\_

24. \_\_\_\_\_

25. See left.

26. See left.

27. See left.