Name Date

Practice A

1.4

Multiply.

1.  2.  3.  4. 

5.  6.  7.  8. 

9.  10.  11.  12. 

13. A water tank leaks 5 gallons of water each day. What integer represents the change in the number of gallons of water in the tank after 7 days?

Multiply**.**

14.  15.  16. 

17.  18.  19. 

Evaluate the expression.

20.  21.  22. 

23.  24.  25. 

26. ** 27.  28. 

Find the next two numbers in the pattern.

29.  30. 

31. An elevator is 180 feet above the first floor. Each second it descends   
12 feet.

a. What integer is the change in the height of the elevator each second?

|  |  |  |  |
| --- | --- | --- | --- |
| Time | 3 sec | 6 sec | 9 sec |
| Height |  |  |  |

b. Copy and complete the table.

c. Estimate how many seconds it takes the elevator to get to the first floor. Explain your reasoning.

d. From the first floor, it takes 4 seconds to reach the basement floor. What is the height of the basement floor with respect to the first floor?

Name Date

Practice B

1.4

Multiply.

1.  2.  3.  4. 

5. The water in a pool evaporates at a rate of 16 gallons per week. What integer represents the change in the number of gallons of water in the pool after 24 weeks?

Multiply**.**

6.  7.  8. 

9.  10.  11. 

Evaluate the expression.

12.  13.  14. 

15.  16.  17. 

18.  19.  20. 

21. The gym offers a discount when more than one member of the family joins. The first member pays $550 per year. The second member to join   
gets a discount of $75 per year. The third member gets   
an additional $75 discount. The price for the *n*th member is given by 

a. What is the price for the fourth member to join 

b. For a large family, is it possible that a member would join for free? If so, which member would it be? Explain your reasoning.

c. Other than $0, what is the lowest amount that a member would pay to join? Which member would it be? Explain your reasoning.

22. Two integers, *a* and *b*, have a product of 

a. What is the greatest possible sum of *a* and *b*?

b. Is it possible for *a* and *b* to have a sum of 13? If so, what are the integers?

c. What is the least possible difference of *a* and *b*?