

**1.1 Practice B**

Find the value of the expression. Check your answer using estimation.

1.  $3143 + 999$

2. 
$$\begin{array}{r} 5154 \\ + 2139 \\ \hline \end{array}$$

3.  $4137 + 3895$

4. 
$$\begin{array}{r} 4123 \\ - 2314 \\ \hline \end{array}$$

5.  $366 - 8549$

6.  $5610 - 3462$

7.  $92 \times 17$

8.  $412 \times 327$

9. 
$$\begin{array}{r} 644 \\ \times 189 \\ \hline \end{array}$$

10.  $2584 \div 152$

11. 
$$\frac{1540}{44}$$

12.  $4004 \div 143$

13. 
$$\frac{8167}{219}$$

14.  $4199 \div 99$

15.  $29,104 \div 135$

16. You sign up for 13 weeks of swim lessons. The total cost is \$325. What is the cost per week?
17. The cafeteria has 75 tables and 912 chairs. What is the total number of tables and chairs?
18. The convention center has 18 pianos. Each piano has 88 piano keys. What is the total number of piano keys?
19. You have 800 square feet of the room reserved for tables.
- Each round table requires 49 square feet. How many round tables will fit in 800 square feet?
  - Each rectangular table requires 64 square feet. How many rectangular tables will fit in 800 square feet?
  - The round tables seat 8 people. The rectangular tables seat 12 people. Using your answers in (a) and (b), which type of table will seat more people in the allotted 800 square feet, *round* or *rectangular*?

## 1.2 Practice B

Write the product as a power.

1.  $12 \times 12$

2.  $4 \cdot 4 \cdot 4$

3.  $5 \times 5 \times 5 \times 5$

4.  $25 \times 25 \times 25$

5.  $30 \times 30 \times 30 \times 30 \times 30$

6.  $17 \cdot 17 \cdot 17$

Find the value of the power.

7.  $13^2$

8.  $2^5$

9.  $8^3$

Use a calculator to find the value of the power.

10.  $5^6$

11.  $13^4$

12.  $3^8$

13. Describe and correct the error in writing the value of the product.

$\times 7^5 = 7 \times 5 = 35$

14. The price of a car is  $3 \times 10^4$ . What is the price of the car?

Determine whether the number is a perfect square.

15. 169

16. 625

17. 336

Write the product as a power.

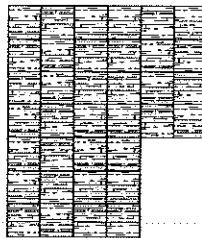
18.  $d \cdot d \cdot d \cdot d$

19.  $5 \cdot z \cdot z \cdot z$

20.  $p \cdot p \cdot p \cdot p \cdot p \cdot p$

21. The number 75 falls between what two perfect squares?

22. A homeowner would like to modify the existing patio to create a square patio, either by adding new tiles or moving existing tiles. Each tile is one foot square. The current patio is shown.



- What is the area of the existing patio in square feet?
- How could the homeowner rearrange the tiles to create a square patio without adding new tiles?
- How many tiles must the homeowner purchase to create a patio that is 49 square feet? Can this be done without moving any of the existing tiles?
- To create a patio that is 25 square feet, the homeowner must move some tiles and remove others. How many tiles must be moved and how many must be removed?