

Instructions

Welcome, Math Explorer! It's time to put your multiplication skills to the test. Read each question carefully and show your work in the space provided. You can check your solutions with the answer key at the very end. Good luck!

Part 1: Number Crunchers

Solve the following multiplication problems. Show your work.

$$\begin{array}{r} 47 \\ \times 23 \\ \hline \end{array}$$

$$\begin{array}{r} 86 \\ \times 51 \\ \hline \end{array}$$

$$\begin{array}{r} 95 \\ \times 78 \\ \hline \end{array}$$

$$\begin{array}{r} 135 \\ \times 28 \\ \hline \end{array}$$

$$\begin{array}{r} 459 \\ \times 62 \\ \hline \end{array}$$

$$\begin{array}{r} 308 \\ \times 46 \\ \hline \end{array}$$

Part 2: Real-World Math

Read each word problem and write your answer in the box provided.

1. A large auditorium has 118 rows of seats. If each row can hold 45 people, what is the total seating capacity of the auditorium?

2. A cargo truck is loaded with 52 identical crates. If each crate weighs 185 pounds, what is the total weight of all the crates on the truck?

3. A bakery sells muffins for \$3 each. On Monday, they sold 124 muffins. On Tuesday, they sold 98 muffins. What is the total amount of money the bakery made from muffins on both days combined? (This is a two-step problem!)

Part 3: Brain Bender Challenge

Think carefully to solve these tricky problems!

1. Find the missing number in the equation: $36 \times \underline{\hspace{2cm}} = 2,808$

2. A video game company produces 1,250 copies of a new game every hour. If the factory runs for 16 hours a day, how many copies of the game can it produce in one day?

Answer Key

Part 1: Number Crunchers

1. $47 \times 23 = \mathbf{1,081}$
2. $86 \times 51 = \mathbf{4,386}$
3. $95 \times 78 = \mathbf{7,410}$
4. $135 \times 28 = \mathbf{3,780}$
5. $459 \times 62 = \mathbf{28,458}$
6. $308 \times 46 = \mathbf{14,168}$

Part 2: Real-World Math

1. $118 \times 45 = \mathbf{5,310}$. The total seating capacity is 5,310 people.
2. $52 \times 185 = \mathbf{9,620}$. The total weight of the crates is 9,620 pounds.
3. Step 1: Find the total number of muffins sold. $124 + 98 = 222$ muffins.
Step 2: Multiply the total muffins by the cost. $222 \times \$3 = \mathbf{\$666}$. The bakery made \$666.

Part 3: Brain Bender Challenge

1. $2,808 \div 36 = \mathbf{78}$. The missing number is 78. (You can solve this using division!)
2. $1,250 \times 16 = \mathbf{20,000}$. The factory can produce 20,000 copies in one day.