

📖 MISSION: THE LOST CITY OF FRACTIONS 📖

Explorer Name: _____

Rank: Lead Archaeologist

Current Expedition Funds: _____ / 4,000 Gold

The Mission: You have discovered an ancient map leading to a hidden city of gold. However, the path is blocked by stone puzzles!

- **The Problem:** The ancient gates only open when fractions with **Unlike Denominators** are added together.
- **The Rule:** You cannot add fractions until they speak the same language! You must find a **Common Denominator (Lowest Common Multiple)** first, convert the fractions, and then find the sum. Simplify your answer if possible!

🔑 STAGE 1: THE TROPICAL JUNGLE GATES (1,200 Gold total)

Find the common denominator, rewrite the fractions, and add them together to clear the jungle path.

#1: The Vines of Sector A (300 Gold)

- **Ancient Puzzle:** $\frac{1}{2} + \frac{1}{3}$
- **Find Common Denominator:** LCM of 2 and 3 = _____
- **Rewrite Fractions:** — + —
- **Final Sum:** _____

#2: The Quicksand Crossing (300 Gold)

- **Ancient Puzzle:** $\frac{1}{4} + \frac{2}{3}$
- **Find Common Denominator:** LCM of 4 and 3 = _____
- **Rewrite Fractions:** — + —
- **Final Sum:** _____



#3: The Serpent's Bridge (300 Gold)

- **Ancient Puzzle:** $\frac{2}{5} + \frac{3}{10}$
- **Find Common Denominator:** LCM of 5 and 10 = _____
- **Rewrite Fractions:** $- + -$
- **Final Sum:** _____
(Simplify if needed!)

#4: The Waterfall Passage (300 Gold)

Ancient Puzzle: $\frac{1}{6} + \frac{3}{4}$

- **Find Common Denominator:** LCM of 6 and 4 = _____
- **Rewrite Fractions:** $- + -$
- **Final Sum:** _____



STAGE 2: THE ANCIENT TEMPLE FLOODS (1,400 Gold total)

The temple is filling with water! Solve these slightly tougher puzzles by showing your work to escape to the higher levels.

#5: The Crumbling Staircase (450 Gold)

- **Ancient Puzzle:** $\frac{3}{8} + \frac{1}{6}$
- **Show Your Conversion Work:**
- **Final Sum:** _____

#6: The Chamber of Arrows (450 Gold)

- **Ancient Puzzle:** $\frac{2}{7} + \frac{1}{3}$
- **Show Your Conversion Work:**
- **Final Sum:** _____



#7: The Golden Sarcophagus (500 Gold)

- **Ancient Puzzle:** $\frac{5}{12} + \frac{1}{4}$
 - **Show Your Conversion Work:**
 - **Final Sum:** _____ (Be sure to simplify this answer!)
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**STAGE 3: EXPLORER LOG WORD PROBLEMS (600 Gold total)**

Directions: Read your explorer journal. Set up the fractions, find the common denominator, and solve.

#8: Journal Entry - Rations Pack (300 Gold)

"Day 14. Food supplies are dwindling. My team ate $\frac{1}{3}$ of our total dried fruit pack in the morning and another $\frac{2}{5}$ of the pack during our evening trek. How much of the total pack have we eaten combined?"

- **Set Up Equation:** _____ + _____
- **Show Common Denominator Steps:**
- **Total Food Consumed:** _____ of the pack

#9: Journal Entry - Water Canteen (300 Gold)

"Day 15. The desert heat is intense. My camel drank $\frac{1}{2}$ a tank of water from the reserve supply, and my assistant used $\frac{1}{8}$ of a tank for cooking. What total fraction of the water reserve tank was used?"

- **Set Up Equation:** _____ + _____
 - **Show Common Denominator Steps:**
 - **Total Water Used:** _____ of the tank
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👑 THE TREASURE ROOM GUARDIAN 👑**BOSS BATTLE VALUE:** 800 Gold

WARNING: You have reached the central vault of the Lost City! The final giant stone statue requires a massive double-conversion. Solve this ancient puzzle perfectly to unlock the vault and claim your 800 Gold bonus!

The Guardian's Cipher:

$$\frac{4}{9} + \frac{1}{6}$$

- **Step 1: Find the Lowest Common Denominator for 9 and 6:** _____
- **Step 2: Rewrite both fractions using your new denominator:**
- **Step 3: Add them up and reduce the final answer if possible:**
- **FINAL VAULT PASSCODE:** _____

