# Adventure Time: Decoding Ancient Roman Secrets!

Hey Daniella and Alisia, imagine you're explorers who've just found an ancient Roman treasure map! But wait... the numbers look strange! They're written in **Roman Numerals**. Let's learn how to read them so we can find the treasure!

#### Meet the Roman Numerals!

The Romans used letters to write numbers. Let's start with the first few important ones:

- **I** = 1 (Like one finger pointing!)
- **V** = 5 (Maybe like a hand showing 5 fingers?)
- **X** = 10 (Like crossing two 'V's or crossing your arms to make 10!)

We'll learn about L (50), C (100), D (500), and M (1000) later!

### **How to Build Numbers (Roman Style!)**

The Romans had simple rules for putting these letters together:

1. **Rule 1: Add Them Up!** When you put a smaller numeral \*after\* a bigger one, or numerals of the same value together, you ADD them.

Examples:

```
 \begin{split} \circ & \text{II} = \text{I} + \text{I} = 1 + 1 = 2 \\ \circ & \text{III} = \text{I} + \text{I} + \text{I} = 1 + 1 + 1 = 3 \\ \circ & \text{VI} = \text{V} + \text{I} = 5 + 1 = 6 \\ \circ & \text{VII} = \text{V} + \text{I} + \text{I} = 5 + 1 + 1 = 7 \\ \circ & \text{XI} = \text{X} + \text{I} = 10 + 1 = 11 \\ \circ & \text{XII} = \text{X} + \text{I} + \text{I} = 10 + 1 + 1 = 12 \\ \circ & \text{XV} = \text{X} + \text{V} = 10 + 5 = 15 \\ \circ & \text{XVI} = \text{X} + \text{V} + \text{I} = 10 + 5 + 1 = 16 \\ \end{split}
```

2. **Rule 2: Subtract Sometimes!** This is a special trick! When you put \*one\* smaller numeral (only I right now) \*before\* a bigger one (V or X), you SUBTRACT the smaller one. Examples:

```
    IV = Take 1 away from 5 = 4 (It's NOT IIII)
    IX = Take 1 away from 10 = 9 (It's NOT VIIII)
```

# Let's Practice Decoding!

Can you figure out these numbers from the treasure map?

What number is III?
What number is V?
What number is VIII?
What number is IV?
What number is X?
What number is IX?
What number is XIII?
What number is XIV?
What number is XIX?

#### Your Turn to Write!

Now, write these numbers using Roman Numerals:

```
• 2 = ____

• 7 = ___

• 10 = ___

• 11 = ___

• 15 = ___

• 17 = ___

• 19 = ___

• 20 = ___ (Hint: Think 10 + 10)
```

## Fun Fact & Challenge!

Did you know Roman numerals don't have a zero? The idea of zero came much later!

**Challenge:** Look at an analog clock face. Do any of the numbers use Roman numerals? Can you read the time?

Awesome job, explorers Daniella and Alisia! You're learning to read the ancient Roman code!