

# Mathematics CFA Template

## Pre-Instruction: Part 1

1. List the Standard. Underline the nouns (what students will know) and highlight the verbs (what student will do):

7.RP.3 – **Use** proportional relationships to **solve** multi-step ratio and percent problems. (e.g. *simple interest, tax, gratuities and commissions, fee*).

2. Mathematical Practices

SMP.1  
SMP.4  
SMP.5  
SMP.7

3. I Can Statements – Put learning targets in student friendly terms.

**I CAN**, solve multi-step ratio and percent problems that involve simple interest, tax, markup & markdown, gratuities & commissions, fees.

Depth of Knowledge of the standard (Highlight the Level of the Learning Target):

Level 1 Recall; **Level 2 – Skill/Concept**; Level 3 – Strategic Thinking; Level 4 – Extended Thinking

4. List the skills students need to know in order to begin this standard:

- Functions / keys of calculator
- Cross multiplication
- Part of proportions
- What is a percent of number

5. What type of assessment am I going to write? [selected response (m/c, t/f, y/n, matching, fill in \_\_\_) **or** constructed response (**short**: word, phrase, sentence, single problem; **extended**: multi-step operations in math, problem solving)] List the assessment questions.

- If you borrow \$5,000 from the bank at a rate of 7%. If you pay back the loan in 4 years, how much simple interest was paid to the bank.
- You buy a pair of basketball shoes for \$79.99. Sales tax is 8.5%.
  - How much tax will you pay? (Round to the nearest cent)
  - What is the total amount you paid for the shoes?
- It is common practice to leave a waiter/waitress a 15% gratuity based on the amount of the bill. If your meal at Chili's was \$21.53. What was the amount of gratuity left for your waiter/waitress?
- A real estate broker receives a standard 7% commission for every house they sell. If the agent sold a house for \$125,000, how much commission will they earn?
- To cash a check at a gas station, there is a check cashing fee of 3.5%. If a check in the amount of \$654 is cashed, how much of a fee will be assessed?

6. Scoring Guide

**Exceeds Expectations:** 5 of 5 with proper procedure shown

**Proficient:** 4 of 5 correct with proper procedure shown

**Approaching Proficiency:** 3 of 5 correct with proper procedure shown

**Not Proficient:** 1 or 2 of 5 correct.

