

Mathematics CFA Template

Pre-Instruction

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

7.NS.1d – **Apply** and **extend** previous understandings of addition and subtraction to **add** and **subtract** rational numbers; **represent** addition and subtraction on a horizontal or vertical number line diagram.

d) **Apply** properties and operations as strategies to add and subtract rational numbers.

2. Mathematical Practices

SMP.1 – Make sense of problems and persevere in solving them.

SMP.2 – Reason abstractly and quantitatively

SMP.4 – Model with mathematics

SMP.5 – Use appropriate tools strategically

SMP.6 – Attend to precision

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

I CAN, add and subtract rational numbers

I CAN, represent addition and subtraction on a horizontal and vertical number line

I CAN, apply properties and operation as strategies to add and subtract rational numbers

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:

- Add, subtract, multiply, & divide positive rational numbers
- Add, subtract, multiply, & divide positive/negative integers
- Construct number lines, both horizontal & vertical
- Identify number placement on number lines
- Vocabulary (absolute value, comparing, opposites, rational)

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.

- Given the expression $1/2 + (-3/4)$, answer the following:
 - Find the solution to the expression. Show your work.
 - Model the expression on the given number line.
 - Explain in words how you drew your model on the number line above.
- Given the expression $-0.2 - (-1.6)$, answer the following:
 - Find the solution to the expression. Show your work.
 - Model the expression on the given number line
 - Explain in words how you drew your model on the number line above.

6. Scoring Guide

Exceeds Expectations: Proficient AND Explain in words correctly.

Proficient: Find the proper solution, using the proper method.
Model the solution correctly on the number line. Correct starting place and which direction to move.

Approaching Proficiency: Finding correct solution to the expression.

Not Proficient: None of the above.