

Mathematics CFA Template

Pre-Instruction

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

6.EE.5 Understand solving an equation or inequality as a process of answering a question; which values from a specified set, if any, make the equation or inequality true. Use substitution to determine whether a given number in a specified set makes an equation or inequality true.

2. Mathematical Practices

- #1- Make sense and persevere in solving them.
- #2-Reason abstractly and quantitatively
- #3-Construct viable arguments and critique the reasoning of others
- #4-Model with mathematics
- #5-Use appropriate tools strategically
- #6-Attend to precision
- #7-Look for and make use of structure
- #8-Look for and express regularity in repeated reasoning

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

1. I can understand an equation and an inequality.
2. I can solve an equation and an inequality.
3. I can substitute numbers to make an equation or inequality true.

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:

1. Read and understand/make sense of word problems
2. Vocabulary- equation, inequality, expression, substitution
3. What a variable, expression, and an inequality is
4. Prior knowledge of fact families and inverse operations
5. Students have already been exposed to balance models in order to demonstrate equations and inequalities.

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.

Exit tickets- Vocabulary plus skills

Constructive response-short: few questions

Word problems which include using substitution to determine whether a given number in a specified set makes an equation or inequality true.

Must write an equation to solve.

Examples:

1. Joey had 26 papers in his desk. His teacher gave him some more and now he has 100. How many papers did his teacher give him?
2. The equation $0.44s = 11$ where s represents the number of stamps in a booklet. The booklet of stamps costs 11 dollars and each stamp costs 44 cents. How many stamps are in the booklet? Explain the strategies you used to determine your answer. Show that your solution is correct using substitution.

3. Twelve is less than 3 times another number can be shown by the inequality $12 < 3n$. What numbers could possibly make this a true statement?
4. Mark had some pencils in his desk. He gave 59 of them to his classmates and only has 18 left. How many pencils did Mark have in his desk before he gave some away?

6. Scoring Guide

Exceeds Expectations: Student answered 4 out of 4 questions correctly using an equation.

Proficient: Student answered 3 out 4 questions correctly using an equation.

Approaching Proficiency: Student answered 2 out of 4 questions correctly using an equation.

Not Proficient: Student answered 1 out of 4 questions correctly using an equation.

Name: _____ -

6.EE.5 – Formative Assessment

Directions: For each problem, write an equation and solve. Show your work.

1. Joey had 26 papers in his desk. His teacher gave him some more and now he has 100. How many papers did his teacher give him?
2. The equation $0.44s = 11$ where s represents the number of stamps in a booklet. The booklet of stamps costs 11 dollars and each stamp costs 44 cents. How many stamps are in the booklet? Explain the strategies you used to determine your answer. Show that your solution is correct using substitution.
3. Twelve is less than 3 times another number can be shown by the inequality $12 < 3n$. What numbers could possibly make this a true statement?
4. Mark had some pencils in his desk. He gave 59 of them to his classmates and only has 18 left. How many pencils did Mark have in his desk before he gave some away?

Name: _____ -

6.EE.5 – Formative Assessment

Directions: For each problem, write an equation and solve. Show your work.

1. Joey had 26 papers in his desk. His teacher gave him some more and now he has 100. How many papers did his teacher give him?
2. The equation $0.44s = 11$ where s represents the number of stamps in a booklet. The booklet of stamps costs 11 dollars and each stamp costs 44 cents. How many stamps are in the booklet? Explain the strategies you used to determine your answer. Show that your solution is correct using substitution.
3. Twelve is less than 3 times another number can be shown by the inequality $12 < 3n$. What numbers could possibly make this a true statement?
4. Mark had some pencils in his desk. He gave 59 of them to his classmates and only has 18 left. How many pencils did Mark have in his desk before he gave some away?